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1999 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTAL MEDICAL INSURANCE TRUST FUND

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

TRANSMITTING

THE 1999 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, PURSUANT TO 42 U.S.C. 401(c)(2), 1395i(b)(2), AND 1395t(b)(2)

APRIL 12, 1999.—Referred jointly to the Committees on Ways and Means and Commerce, and ordered to be printed

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LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND
Washington, D.C., March 30, 1999

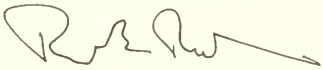
HONORABLE J. Dennis Hastert
Speaker of the House of Representatives
Washington, D.C.

HONORABLE Albert Gore, Jr.
President of the Senate
Washington, D.C.

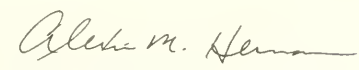
GENTLEMEN:

We have the honor of transmitting to you the 1999 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the 34th such report), in compliance with the provisions of section 1841(b) of the Social Security Act.

Respectfully,

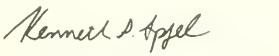


Robert E. Rubin, *Secretary of the Treasury, and Managing Trustee of the Trust Fund.*

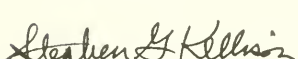


Alexis M. Herman, *Secretary of Labor, and Trustee.*

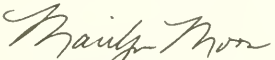
Donna E. Shalala, *Secretary of Health and Human Services, and Trustee.*



Kenneth S. Apfel, *Commissioner of Social Security, and Trustee.*



Stephen G. Kellison, *Trustee.*



Marilyn Moon, *Trustee.*

Nancy-Ann Min DeParle, *Administrator of the Health Care Financing Administration, and Secretary, Board of Trustees.*

CONTENTS

TABLES

FIGURES

I. OVERVIEW

A. INTRODUCTION

The Supplementary Medical Insurance (SMI) program, or Medicare Part B, pays for physician, outpatient hospital, home health, and other services for the aged and disabled. The SMI program is financed primarily by transfers from the general fund of the U.S. Treasury and by monthly premiums paid by beneficiaries. Income not currently needed to pay benefits and related expenses is held in the SMI trust fund, and invested in U.S. Treasury securities.

The Board of Trustees was established under the Social Security Act to oversee the financial operations of the SMI trust fund. The Board is composed of six members. Four members serve by virtue of their positions in the Federal Government: the Secretary of the Treasury who is the Managing Trustee, the Secretary of Labor, the Secretary of Health and Human Services, and the Commissioner of Social Security. The other two members are appointed by the President and confirmed by the Senate to serve as Public Trustees. Stephen G. Kellison and Marilyn Moon began serving on July 20, 1995. The Administrator of the Health Care Financing Administration (HCFA) is designated as Secretary of the Board.

The Social Security Act requires that the Board report to the Congress annually on the financial and actuarial status of the SMI trust fund. This 1999 report is the 34th to be submitted. Due to uncertainty about the future, the financial condition of the SMI trust fund is examined under three alternative sets of assumptions: "low cost," "intermediate," and "high cost." These alternatives are intended to illustrate a reasonable range of possible outcomes. The intermediate assumptions represent the Trustees' best estimate of the expected future economic and demographic trends. The financial adequacy of the SMI program is evaluated for calendar year 1999. The report describes both the near term financial outlook and the longer term outlook throughout a 75-year valuation period.

B. HIGHLIGHTS

The major findings of this report are summarized below. Unless otherwise noted, all estimates are based on the intermediate assumptions.

- In 1998, the SMI program provided protection against the costs of physician and other medical services to 37 million people. Approximately 87 percent of these individuals received medical services covered by SMI during the year and total SMI benefits on their behalf amounted to $76.1 billion.
- Using current income and a small portion of accumulated assets, the SMI program is expected to be able to meet all benefit and administrative obligations throughout calendar year 1999. The SMI trust fund is adequately financed for calendar year 1999 under all three sets of assumptions.
- The SMI trust fund is expected to remain adequately financed into the indefinite future, but only because current law provides for the establishment of program financing each year based on an updated calculation of expected cost per SMI beneficiary.
- SMI benefits have generally been growing rapidly although rates of growth have moderated in recent years. Even so, outlays have increased 41 percent over the past 5 years (33 percent on a per-beneficiary basis). During this period the program grew about 9 percent faster than the economy as a whole, despite efforts to control SMI costs.
- SMI expenditures are expected to continue to grow faster than the economy as a whole. SMI outlays were less than 1 percent of the Gross Domestic Product (GDP) in 1998 and are projected to grow to about 2.7 percent by 2070. This projection is significantly lower than that shown in the 1998 annual report, primarily because of slower-than-expected growth in 1998 and assumed slower medical inflation in the future.
- SMI trust fund assets grew by $10.1 billion in 1998, an unusually large increase. This occurred primarily because most premium and general fund revenues for January 1999 were received in December 1998, resulting in roughly 13 months of income for the year rather than the usual 12. In the absence of this extra income, the SMI trust fund would have grown by about $3.9 billion.
- We note with great concern the past and projected rapid growth in the cost of the program and urge the nation's policy makers to

consider effective means of controlling SMI costs. Prompt, effective, and decisive action is necessary.

Key SMI Data for Calendar Year 1998:

- SMI covered about 32 million aged and 4 million disabled persons who chose to enroll in the program. The total number of SMI enrollees increased by 0.7 percent in 1998, and by 16.3 percent over the past 10 years.
- SMI benefits amounted to $76.1 billion, about a 4.6 percent increase over the prior year. Average benefits per SMI enrollee increased by 3.9 percent to $2,075.
- Administrative costs were $1.5 billion or about 2 percent of program expenditures.
- Summary of SMI trust fund operations in 1998 (in billions):

Fund Balance (12/31/97)	$36.1
Income	87.7
Expenditures	77.6
Fund Balance (12/31/98)	46.2
Net Change in Balance	10.1

- General revenue accounted for about 73 percent of income. Premiums were the second largest source of income, accounting for about 24 percent of the total. Interest and other miscellaneous income accounted for the remainder, or about 3 percent of income.
- Payments for the costs of fee-for-service physician and other professional services represented 59 percent of SMI benefits. Fee-for-service payments to facilities accounted for another 24 percent and managed care plans accounted for the final 17 percent.

C. 1998 TRUST FUND FINANCIAL OPERATIONS

SMI income in calendar year 1998 was $87.7 billion and total expenditures were $77.6 billion. The fund balance therefore increased by a net total of $10.1 billion. As of December 31, 1998 the SMI trust fund had a balance of $46.2 billion.

1. Income

The $87.7 billion in income received by the SMI program last year was derived from the following sources:

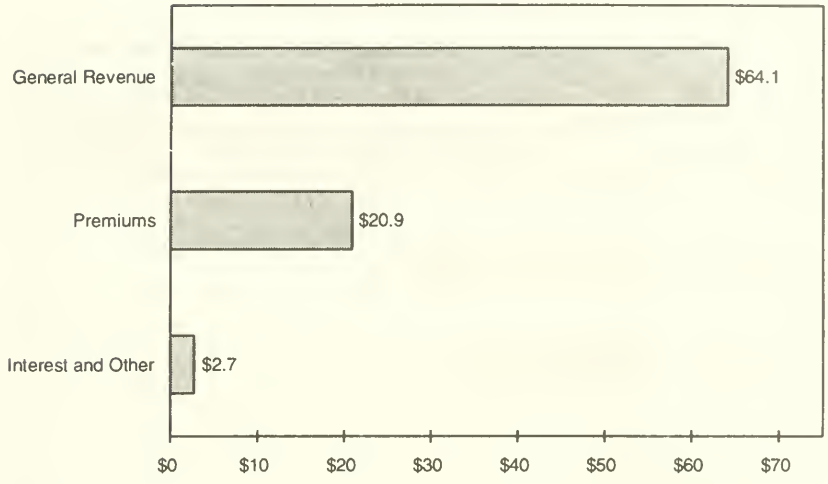
- General revenue. Transfers from the general fund of the Treasury were the largest source of income, accounting for $64.1 billion or about 73 percent of total SMI income in calendar year 1998. The general revenue contribution is determined, based on expected cost per beneficiary less expected premium collections, following a statutory formula. In effect, general revenue approximately makes up the difference between premium collections plus other income and expected total program costs. The statutory formula also allows for the maintenance of a small reserve to cover any unforeseen contingencies.

- Premiums. Premium collections amounted to $20.9 billion or about 24 percent of calendar year 1998 income. Premium rates are set annually, based on a method specified in the law. In calendar year 1998 the SMI premium was $43.80 per month.

- Interest. Interest income on the U.S. Treasury securities held by the trust fund plus a very small amount of other income amounted to $2.7 billion or about 3 percent of total SMI income in calendar year 1998.

Income from beneficiary premiums and general revenues was artificially high in 1998 because the majority of such revenues for January 1999 were received in December 1998. As a result, the SMI trust fund received roughly 13 months of income for the year rather than the usual 12. In 1999, correspondingly, only about 11 months of revenues will be received, bringing trust fund assets back to their normal level at the end of the year.

Figure I.C1.—SMI Income in Calendar Year 1998
[In billions]



2. Expenditures

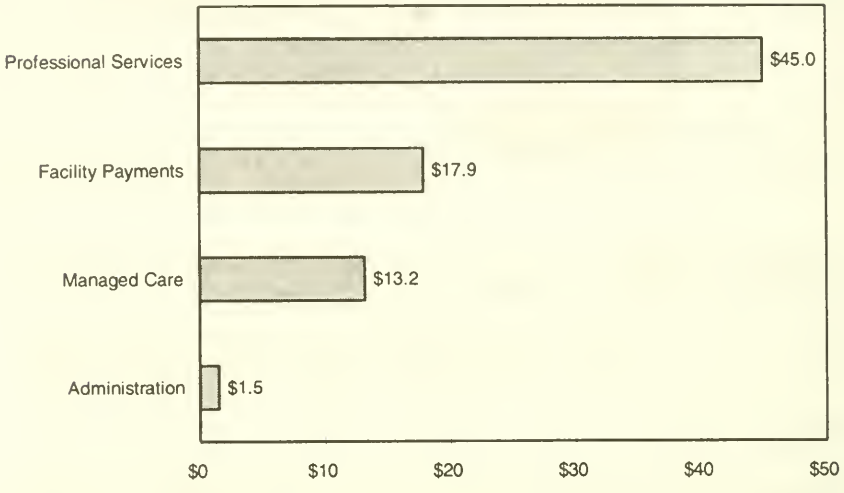
The SMI program spent $77.6 billion last year. The major expenditures were:

- Benefit payments. More than 98 percent of SMI outlays in calendar year 1998 were for benefit payments to providers of services and managed care plans. Managed care payments were $13.2 billion, or about 17 percent of all benefit payments. This represented a 20 percent increase over the corresponding figure for 1997, reflecting rapid growth in the number of beneficiaries choosing to join Health Maintenance Organizations (HMOs). Within the fee-for-service sector, $45 billion was paid for physician and other professional services last year, the largest type of benefit payment, making up 59 percent of total benefits. These payments grew only 2 percent over the previous year, reflecting the net effect of higher per-person costs but fewer beneficiaries receiving care on a fee-for-service basis. Finally, payments to facilities ($17.9 billion), such as outpatient facilities and skilled nursing facilities, increased about 2 percent from 1997 to 1998 and made up about 24 percent of total SMI benefit outlays in 1998.

- Administrative expenses. About $1.5 billion, or about 2 percent of SMI program outlays during calendar year 1998, paid the administrative expenses of the program. This amount included funds to support the Medicare carriers and intermediaries (generally

insurance companies) that assist in administering SMI, as well as funds for federal salaries and related expenses.

Figure I.C2.—SMI Expenditures in Calendar Year 1998
[In billions]



D. ECONOMIC AND DEMOGRAPHIC ASSUMPTIONS

Actual future costs of benefits under the SMI program will depend on a number of factors, apart from any possible changes in law and regulations. These factors include the size and composition of the population eligible for benefits, the volume and intensity of SMI covered services used per beneficiary, and changes in the price per service. Similarly, expected premium income will depend on the number of beneficiaries enrolled in SMI, among other factors, and interest income to the trust fund will depend on future interest rates.

To take account of the uncertainty inherent in forecasting many of these factors, projections of SMI income and costs have been developed under three alternative scenarios, known as "low cost", "intermediate", and "high cost." For simplicity of presentation, much of the analysis in this overview centers on the projections under intermediate assumptions. However, it is important to recognize that actual conditions are very likely to differ from that scenario or any other specific set of assumptions.

Some of the key demographic and economic variables that determine SMI costs and income are common to the Old-Age, Survivors, and Disability Insurance (OASDI) program and the HI program and are explained in detail in the report of the Board of Trustees of the OASDI program. As shown in table I.D1 below, these include Consumer Price Index (CPI) change, real interest rates, fertility rates, and life expectancy. ("Real" indicates that the effects of inflation have been removed, allowing better comparisons across time periods.) The assumptions vary, in most cases, from year to year during the first 5 to 25 years before reaching their so-called "ultimate" values for the remainder of the 75-year projection period. These ultimate values are shown in the table below.

Table I.D1.—Ultimate Assumptions

	Intermediate	Low Cost	High Cost
Annual percentage change in:			
Consumer Price Index (CPI)	3.3	2.3	4.3
Real interest rate (percent)	3.0	3.7	2.2
Fertility rate (children per woman)	1.9	2.2	1.6
Life expectancy at birth in 2075 (combined average for men and women, in years)	81.8	78.8	85.7

Other assumptions are specific to the SMI program. These SMI assumptions include rates at which beneficiaries will use particular

types of services, the amount of the physician fee update, and the rates at which eligible elderly and disabled persons will enroll in SMI.

While it is reasonable to assume that actual trust fund experience will fall within the range defined by the three alternative sets of assumptions, no definite assurance can be given in light of the wide variations in experience that have occurred since the beginning of the program. In general, a greater degree of confidence can be placed in the assumptions and estimates for the earlier years than for the later years. Nonetheless, even for the earlier years, the estimates are only an indication of the expected trend and the general range of future program experience.

E. ACTUARIAL ESTIMATES

The financial status of the SMI program and how it is evaluated differ fundamentally from the OASDI and HI programs. These differences arise from the nature of the financing for SMI. In particular, the SMI premium and the corresponding income from general revenues are established annually at a level sufficient to cover the following year's expenditures. Thus, the SMI program is automatically in financial balance under present law, in contrast to OASDI and HI where financing established many years earlier may prove significantly higher or lower than subsequent actual costs. Moreover, the SMI program is voluntary (whereas OASDI and HI are generally compulsory) and income is not based on payroll taxes. These differences result in a financial assessment that differs in some respects from those for OASDI and HI, as described in the following sections.

1. Financial Adequacy in Calendar Year 1999

The SMI program is traditionally considered to have met the primary tests of financial adequacy if the financing established for a given period (e.g., through the end of calendar year 1999) is sufficient to fund all services provided through that period and associated administrative expenses. Further, to protect against the possibility that cost increases under the program will be higher than assumed, the program needs assets adequate to cover a reasonable degree of variation between actual and projected costs. These traditional tests of adequacy reflect, in part, the similarity of SMI to some private sector group health insurance plans.

According to these tests, the financing established through December 1999, together with a small amount of trust fund assets, is estimated to be sufficient to cover benefits and administrative costs incurred through that time period. The tests of financial adequacy are met under intermediate assumptions as well as lower range and upper range projections. Planned program financing is sufficient to maintain a level of trust fund assets that is adequate to cover a reasonable degree of variation between actual costs and projected costs.

During each of the last few years, SMI expenditures have increased somewhat more slowly than expected when financing was established. As a result, income from premiums and general revenues exceeded program costs and trust fund assets grew to a level somewhat above what is generally considered adequate for a contingency reserve for the SMI program. Accordingly, the financing for 1999 was set below the

55-916 99 - 2

level estimated to fully cover costs, with the expectation that a small portion of trust fund assets would be used in 1999 to make up the difference. This procedure, which resulted in increasing the 1999 monthly premium to $45.50, is intended to gradually bring trust fund assets in line with the lower level that is adequate for contingency purposes.

The amount of the contingency reserve needed in SMI is much smaller (both in absolute dollars and as a fraction of annual program costs) than in the HI or OASDI programs. This is so because the SMI premium rate and corresponding general revenue transfers are determined annually based on estimated future costs while the HI and OASDI payroll tax rates are set in law and are therefore much more difficult to adjust should circumstances change.

2. SMI Trust Fund Outlook After Calendar Year 1999

Table I.E1 shows the estimated operations of the SMI trust fund under the intermediate assumptions during calendar years 1998 through 2008. This table shows that both income and expenditures are estimated to grow at about 8 percent per year for most of the ten-year period. Income and outgo would remain in balance, as a result of the annual adjustment of premium and general revenue income to match program costs. Assets held in the trust fund are projected to decrease slightly in 1999 through 2002, as part of the effort to adjust asset levels to better match the program's contingency needs (as noted above). After 2002, assets held in the fund are projected to increase sufficiently to maintain an adequate contingency reserve for the program. Similar projections under the low cost and high cost assumptions are shown in section II of this report. Under all assumptions, the SMI program would grow rapidly but would remain adequately financed into the indefinite future because of the automatic financing on a year-to-year basis.

Table I.E1.—Estimated Operations of the SMI Trust Fund Under Intermediate Assumptions, Calendar Years 1998-2008

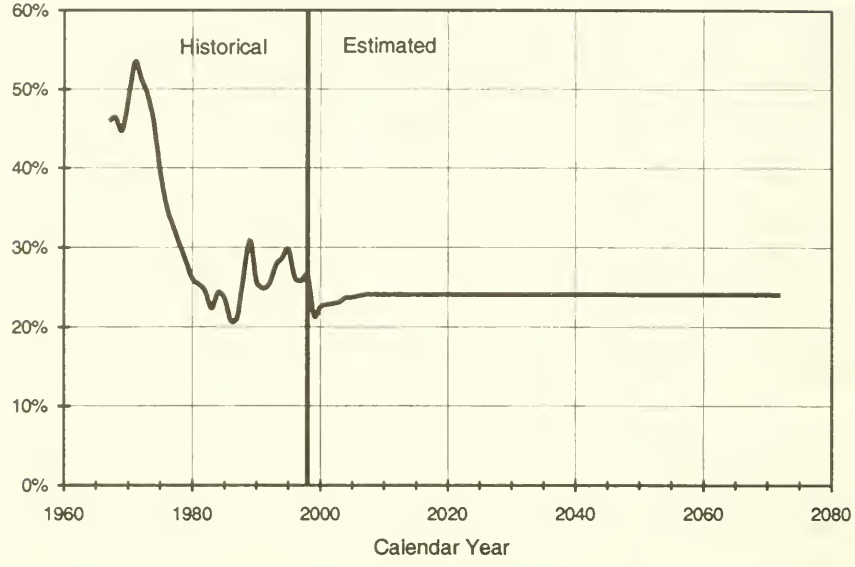
[Dollar amounts in billions]

Calendar year	Total income	Total expenditures	Change in fund	Fund at year end
1998[1]	$87.7	$77.6	$10.1	$46.2
1999	79.6	85.0	-5.4	40.8
2000	94.5	97.3	-2.8	38.0
2001	102.3	103.2	-0.8	37.2
2002	111.7	111.8	-0.2	37.1
2003	122.4	121.2	1.2	38.3
2004	130.5	130.0	0.6	38.9
2005	139.4	138.7	0.7	39.6
2006	150.9	149.2	1.8	41.4
2007	164.1	161.0	3.1	44.5
2008	177.7	174.2	3.5	47.9

[1]Figures for 1998 represent actual experience.

The Balanced Budget Act of 1997 made numerous changes to the Medicare program, many of them quite substantial. One of the most important provides for the monthly SMI premium to be permanently established at the level of 25 percent of program expenditures as shown in figure I.E1. Prior to this legislation, premiums would have represented a steadily declining share of costs. Other provisions in the Balanced Budget Act include a new prospective payment system for outpatient hospital services under Medicare and coverage of several new preventive or "screening" benefits. In addition, annual payment updates for all SMI health care providers are constrained and a problem with beneficiary coinsurance for outpatient hospital services will be corrected. Finally, the majority of home health care services are reclassified as an SMI benefit, shifting the cost of such services over a 6-year period from the HI trust fund to the SMI trust fund. Collectively, the SMI benefit provisions in the Balanced Budget Act result in a net increase in costs.

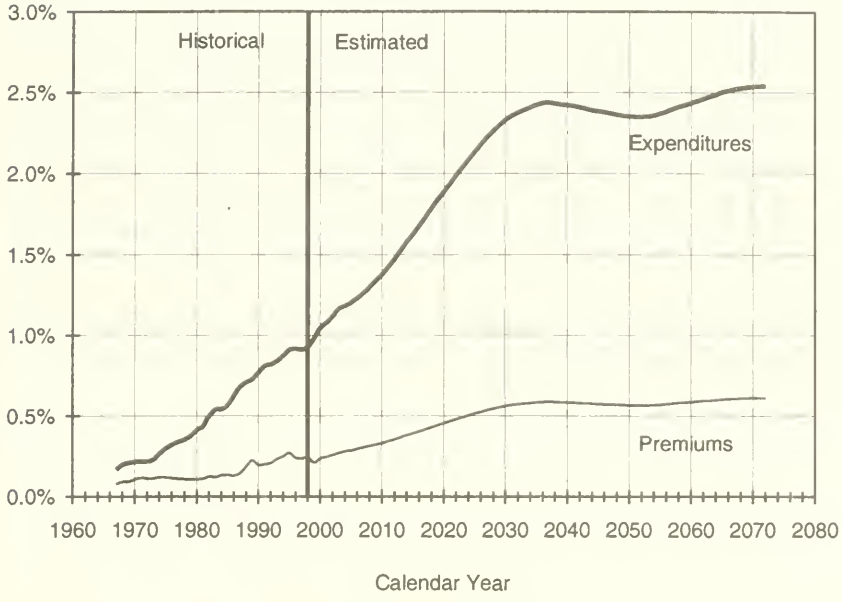
Figure I.E1.—Premium Income as a Percent of SMI Expenditures



The estimated costs shown in this annual report are lower than those in the 1998 annual report. The lower estimates are a result of (1) actual benefit payments for 1998 being lower than the estimates in the 1998 annual report, (2) the recent experience indicating that rates of growth for some SMI services have slowed from those expected in the 1998 annual report, and (3) lower assumed rates of general and medical inflation. However, in spite of the lower estimates for program costs in the 1999 annual report, costs are expected to continue to increase faster than the economy as a whole. Thus, even though the SMI program is considered adequately financed by traditional standards, the continuing trend of relatively rapid cost increases remains a source of great concern.

Figure I.E2 shows past SMI expenditures and premium income as a percent of GDP and projections through 2070 based on intermediate assumptions. Under these assumptions, annual SMI expenditures would grow from less than 1 percent of GDP in 1998 to about 2.5 percent of GDP within 30 years. Similarly, on a combined basis, Medicare (both HI and SMI) would grow from less than 3 percent of GDP in 1998 to over 5.5 percent of GDP by 2070.

Figure I.E2.—SMI Expenditures and Premiums as a Percent of GDP



Projecting forward 75 years is difficult, given the many uncertainties about future performance of the economy and other variables, but it has the advantage of allowing for the presentation of future trends that may reasonably be expected to occur. Most importantly, this forecast reflects: (1) continuing growth in the volume and intensity of services provided per beneficiary over the next decade; and (2) the impact of a large increase in SMI beneficiaries after the turn of the century as the "baby boom" generation (those born between 1945 and 1965) turns age 65 and begins to receive benefits.

In this intermediate projection, increases in the cost per beneficiary during the initial 25-year period are assumed to decline gradually in the last 12 years of that period to the same growth rate as GDP per capita and then to continue at the same rate as GDP per capita for the following 50 years. Therefore, changes in the last 50 years of the period are attributable only to demographic changes in the population. This assumption may seem at odds with historical experience, since SMI costs per beneficiary have generally increased faster than GDP per capita since the inception of the program. However, assuming a continuation of the historical trend for another 75 years would result in an SMI program so large as a percent of GDP that it would be implausible given other demands on those resources.

Even with the assumed moderation of expenditure growth described above, the projected cost of the SMI program under present law would place steadily increasing demands on beneficiaries and society at large. Over time, the SMI premiums and coinsurance amounts paid by beneficiaries would represent a growing share of their total income. In 1998, for example, about 5 percent of a typical 65-year-old's Social Security benefit was withheld to pay the monthly SMI premium of $43.80. Twenty years later, under the intermediate assumptions, the same beneficiary's premium would require 11 percent of such income. Similarly, SMI general revenues in fiscal year 1998 were equivalent to 5.9 percent of the personal and corporate Federal income taxes collected in that year. If such taxes remain at their current level, relative to the national economy, then SMI general revenue financing in 2070 would represent roughly 17 percent of total income taxes.

F. CONCLUSION

The financing established for the SMI program for calendar year 1999 is estimated to be sufficient to cover program expenditures for that year and to preserve an adequate contingency reserve in the SMI trust fund. Moreover, trust fund income is projected to equal expenditures for all future years—but only because beneficiary premiums and government general revenue contributions are set to meet expected costs each year.

The projections of SMI expenditures shown in this year's annual report are significantly lower than in our 1998 report. The improvement is due to slower-than-expected growth in 1998 together with adjustments to assumed future growth trends based on this experience. Both general and medical inflation are assumed to be somewhat more moderate than previously expected. In addition, "residual" growth rates for certain types of SMI costs, reflecting increases in utilization and intensity of services, are projected at somewhat lower levels based on the latest historical experience.

The resulting improvement in projected SMI expenditures, while welcome, is not sufficiently large to diminish our concern with expenditure growth. As in past reports, we note with great concern that program costs have generally grown faster than the GDP and that this trend is expected to continue under present law. The projected increases are initially attributable in part to assumed continuing growth in the volume and intensity of services provided per beneficiary. Many of the provisions in the Balanced Budget Act are designed to help address this issue by constraining cost increases through the implementation of new payment mechanisms and limits on fee updates for health care providers. However, the expenditure reductions under the Balanced Budget Act are more than offset by the increases in SMI costs arising from (1) the transfer of a substantial portion of home health care services from the HI program to the SMI program, (2) the introduction of certain new preventive care benefits, and (3) the correction of an excessive level of beneficiary coinsurance on outpatient hospital services.

Starting in 2010, the retirement of the post-World War II baby boom generation will also have a major influence on the growth in program costs. As a result, we continue to be very concerned by the rate of growth in SMI expenditures. The National Bipartisan Commission on the Future of Medicare, although failing to reach consensus on specific recommendations, has helped set the stage for further analysis of

Medicare reforms by their development of a wide array of potential cost-reducing measures.

As described in our accompanying report on the HI trust fund, prior to the Balanced Budget Act, HI assets were projected to be exhausted in the very near future. The urgency of this situation prompted considerable attention and led directly to the provisions in the Act to slow HI expenditure growth. In contrast, the automatic financing provisions for SMI prevent such crises. As a result, there has been substantially less attention directed toward the financial status of the SMI program than to the HI program—even though SMI expenditures have increased faster than HI expenditures in most years and are expected to continue to do so in the future.

Given the past and projected cost of the program, we urge the nation's policy makers to consider effective means of controlling SMI costs in the near term. For the longer term, the Congress should develop legislative proposals to address the large increases in SMI costs associated with the baby boom's retirement through the same process used to address HI cost increases caused by the aging of the baby boom. We believe that prompt, effective, and decisive action is necessary.

II. ACTUARIAL ANALYSIS

A. MEDICARE AMENDMENTS SINCE THE 1998 REPORT

Since the 1998 Annual Report was transmitted to Congress on April 28, 1998, there have been no legislative changes enacted which would have a significant effect on the financial status of the SMI trust fund.

B. NATURE OF THE TRUST FUND

The Federal SMI Trust Fund was established on July 30, 1965, as a separate account in the United States Treasury. All the financial operations of the SMI program are handled through this fund.

The major sources of revenue of the trust fund are: (1) contributions of the Federal Government that are authorized to be appropriated and transferred from the general fund of the Treasury and (2) premiums paid by eligible persons who are voluntarily enrolled in the program. Eligible persons aged 65 and over have been able to enroll in the program since its inception in July 1966. Since July 1973, disabled persons under age 65, who have met certain eligibility requirements, have also been able to enroll in the program.

The premiums paid by enrollees are based on the standard monthly premium rate, which is the same for enrollees aged 65 and over and for disabled enrollees under age 65. In the early years of the program, fiscal year 1967 through 1973, when only persons aged 65 and over were covered, the premium rate was set by law to cover 50 percent of program costs. Beginning July 1973, eligibility was extended to disabled individuals under 65. The premium rates for fiscal year 1974 and 1975 still were set to cover 50 percent of program costs but only for aged enrollees. As a result, the standard premium rates payable by the disabled enrollees met less than 50 percent of their costs.

Beginning with fiscal year 1976 and extending through June 1983, the percentage increase in the premium rate was limited to the percentage increase in Social Security benefits. During this period, since SMI program costs were increasing faster than increases in Social Security benefits, the portion of program costs covered by the premium steadily declined to approximately 25 percent by June 1983. In January 1984, the financing period changed to a calendar-year basis, and for the transitional period, July 1983 through December 1983, the premium remained frozen. Under legislation enacted periodically from 1984 through 1990, the premium was set to cover 25 percent of the program costs for aged enrollees.

55-916 99 - 3

In 1990, the Congress legislated specific premium rates for 1991 through 1995. These premium amounts for 1992 through 1995 were intended to cover approximately 25 percent of costs during this period. Actual SMI expenditures, however, increased less rapidly than assumed (in part as a result of subsequent legislation to reduce costs). Consequently, the premium rates legislated for 1992 through 1995 covered more than 25 percent of program costs.

For 1996 and later, the premium rates are set to cover 25 percent of the program costs for aged enrollees. However, the Balanced Budget Act of 1997 modified the determination of the premium rates for 1998 through 2003 to phase in the impact of the transfer of some home health expenditures from the HI program to the SMI program. The transfer of the costs associated with these home health services will occur over a 6-year period with an additional 1/6 being transferred each year. However, for purposes of determining the premium, program costs for aged enrollees will be determined as if the transfer will occur over a 7-year period with an additional 1/7 being transferred each year. Accordingly, the premium rates for 1998 through 2003 will cover less than 25 percent of actual program costs.

Beginning July 1973 when eligibility was extended to disabled individuals under 65, in addition to the monthly premium rate, two other monthly rates were established: the actuarial rate for enrollees aged 65 and over and the actuarial rate for disabled enrollees under age 65. The monthly actuarial rate for each of the two respective groups of enrollees equals one-half of the monthly projected cost of benefits and administrative expenses for that group, adjusted to allow for interest earnings on assets in the trust fund and to maintain a sufficient contingency margin. (The contingency margin is an amount appropriate to provide for a moderate degree of variation between actual and projected costs.)

Premiums paid for fiscal years 1967 through 1973 were matched by an equal amount of Government contributions. Beginning July 1973, the amount of Government contributions corresponding to premiums paid by each of the two groups of enrollees is determined by applying a "matching ratio," prescribed in the law for each group, to the amount of premiums received from that group. The ratio is equal to: (1) twice the monthly actuarial rate applicable to the particular group of enrollees, minus the standard monthly premium rate, divided by (2) the standard monthly premium rate.

Standard monthly premium rates and actuarial rates are promulgated each year by the Secretary of Health and Human Services (HHS). The standard monthly premium rates in effect since the beginning of the SMI program are shown in table II.B1. Actuarial rates in effect from July 1973 and later and the corresponding percentages of program costs covered by the premium rate are also shown. Estimated future premium amounts under the intermediate set of assumptions are shown in section III.B.

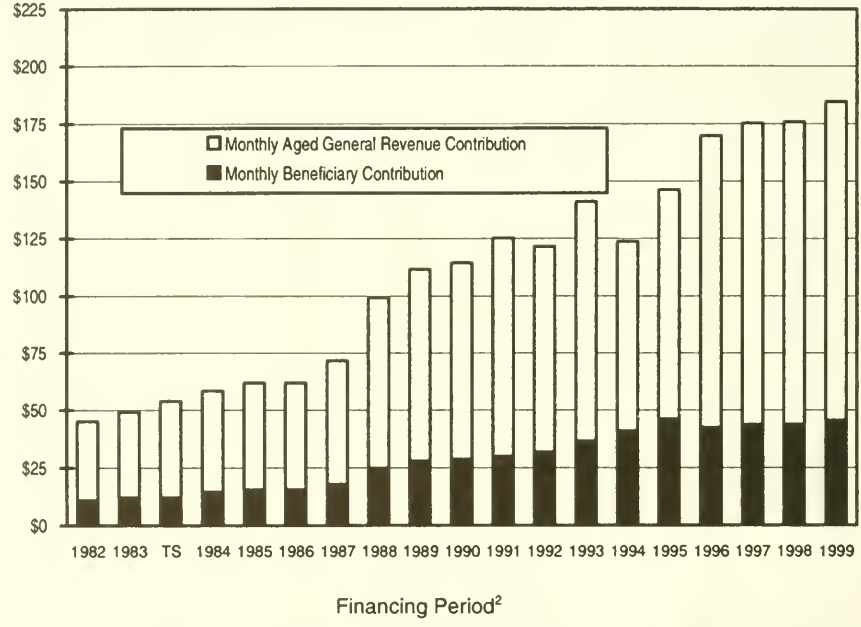
Table II.B1.—Standard Monthly Premium Rates, Actuarial Rates, and Premium Rates as a Percent of Program Cost

	Standard monthly premium rate	Monthly actuarial rate		Premium rates as a percent of program cost	
		Enrollees aged 65 and over	Disabled enrollees under age 65	Enrollees aged 65 and over	Disabled enrollees under age 65
July 1966 - March 1968	$3.00	—	—	50.0%	—
April 1968 - June 1970	4.00	—	—	50.0	—
12-month period ending June 30 of					
1971	5.30	—	—	50.0	—
1972	5.60	—	—	50.0	—
1973	5.80	—	—	50.0	—
1974[1]	6.30	$6.30	$14.50	50.0	21.7%
1975	6.70	6.70	18.00	50.0	18.6
1976	6.70	7.50	18.50	44.7	18.1
1977	7.20	10.70	19.00	33.6	18.9
1978	7.70	12.30	25.00	31.3	15.4
1979	8.20	13.40	25.00	30.6	16.4
1980	8.70	13.40	25.00	32.5	17.4
1981	9.60	16.30	25.50	29.4	18.8
1982	11.00	22.60	36.60	24.3	15.0
1983	12.20	24.60	42.10	24.8	14.5
July 1983 - December 1983	12.20	27.00	46.10	22.6	13.2
Calendar year					
1984	14.60	29.20	54.30	25.0	13.4
1985	15.50	31.00	52.70	25.0	14.7
1986	15.50	31.00	40.80	25.0	19.0
1987	17.90	35.80	53.00	25.0	16.9
1988	24.80	49.60	48.60	25.0	25.5
1989	31.90[2]	55.80	34.30	25.0[3]	40.7[3]
1990	28.60	57.20	44.10	25.0	32.4
1991	29.90	62.60	56.00	23.9	26.7
1992	31.80	60.80	80.80	26.2	19.7
1993	36.60	70.50	82.90	26.0	22.1
1994	41.10	61.80	76.10	33.3	27.0
1995	46.10	73.10	105.80	31.5	21.8
1996	42.50	84.90	105.10	25.0	20.2
1997	43.80	87.60	110.40	25.0	19.8
1998	43.80	87.90	97.10	24.9	22.6
1999	45.50	92.30	103.00	24.6	22.1

[1]In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization program, the standard premium rates for July and August 1973 were set at $5.80 and $6.10, respectively. Effective September 1973, the rate increased to $6.30.
[2]This rate includes the $4.00 catastrophic coverage monthly premium which was paid by most enrollees under the Medicare Catastrophic Coverage Act of 1988 (subsequently repealed).
[3]The premium rates as a percent of program cost for calendar year 1989 apply to the non-catastrophic portion of the standard monthly premium rate.

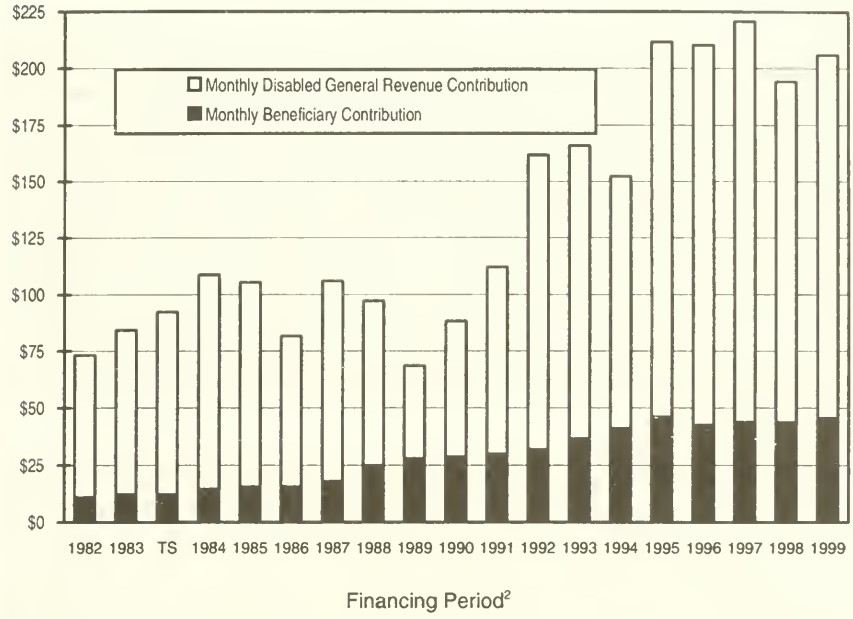
Figures II.B1 and II.B2 are graphic representations of the monthly per capita financing rates, for financing periods since 1982, for enrollees aged 65 and over and for disabled individuals under age 65, respectively. The graphs show the portion of the financing contributed by the beneficiaries and by general revenues. As indicated, general revenue financing is the major source of income for the program.

Figure II.B1.—SMI Aged Monthly Per Capita Income[1]



[1]The amounts shown do not include the catastrophic coverage monthly premium rate for 1989.
[2]For 1983 and earlier, the financing period is July 1 through June 30. For the transitional semester (T.S.), the financing period is July 1, 1983 through December 31, 1983. For 1984 and later, the financing period is January 1 through December 31.

Figure II.B2.—SMI Disabled Monthly Per Capita Income[1]



[1]See footnote 1 of figure II.B1.
[2]See footnote 2 of figure II.B1.

Another source from which revenue of the trust fund is derived is interest received on investments held by the fund. The investment procedures of the fund are described later in this section. Section 201(I) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust fund unconditional money gifts or bequests made for the benefit of the fund or for any activity financed through the fund.

Expenditures for benefit payments and administrative expenses under the program are paid out of the trust fund. All expenses incurred by the Department of HHS, the Social Security Administration (SSA), and by the Department of the Treasury in carrying out the SMI provisions of Title XVIII of the Social Security Act are charged to the trust fund. The Secretary of HHS certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund.

The Social Security Act authorizes the Secretary of HHS to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services under the HI and SMI programs. The costs of such

experiments and demonstration projects are paid out of the HI and SMI trust funds.

Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of the SMI program. Both the capital costs of construction financed directly from the trust fund and the rental and lease or purchase contract costs of acquiring facilities are included in trust fund expenditures. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statement of assets of the trust fund presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and, therefore, is not considered in assessing the actuarial status of the funds.

That portion of the trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration is invested in interest-bearing obligations of the U.S. Government (including special public-debt obligations described below). Investments may also be made in obligations guaranteed as to both principal and interest by the United States, including certain federally sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. These obligations may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such calendar month. Since the inception of the SMI program, the assets have always been invested in special public-debt obligations.

C. OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1998

A statement of the revenue and disbursements of the Federal SMI Trust Fund in fiscal year 1998 and of the assets of the fund at the beginning and end of the fiscal year is presented in table II.C1.

Table II.C1.—Statement of Operations of the SMI Trust Fund During Fiscal Year 1998
[In thousands]

Total assets of the trust fund, beginning of period		$35,205,707
Revenue:		
Premiums from enrollees:		
Enrollees aged 65 and over	$17,153,153	
Disabled enrollees under age 65	2,273,795	
Total premiums		19,426,948
Transfers from general fund of the Treasury:		
Government contributions:		
Enrollees aged 65 and over	51,483,201	
Disabled enrollees under age 65	8,436,105	
Total Government contributions		59,919,306
Other		3,180
Interest:		
Interest on investments	2,605,650	
Interest on amounts of interfund transfers[1]	-398	
Total interest		2,605,252
Total revenue		81,954,686
Disbursements:		
Gross benefit payments		74,889,041
Recoveries from fraud and abuse control activities[2]		-52,200
Net benefit payments		74,836,841
Administrative expenses:		
Treasury administration expenses	146	
Salaries and expenses, HCFA[3]	1,006,789	
Salaries and expenses, Office of the Secretary, HHS	3,511	
Salaries and expenses, SSA	417,620	
Prospective Payment Assessment Commission	2,806	
Railroad Retirement administrative expenses	3,894	
Office of Personnel Management expenses	5	
Total administrative expenses		1,434,771
Total disbursements		76,271,612
Net addition to the trust fund		5,683,074
Total assets of the trust fund, end of period		40,888,781

[1]A positive figure represents a transfer of interest to the SMI trust fund from the other trust funds. A negative figure represents a transfer of interest from the SMI trust fund to the other trust funds.
[2]Represents postpayment recoveries from medical reviews. Prepayment savings from coding corrections and medical reviews were an additional $2,773.3 million.
[3]Includes administrative expenses of the carriers and intermediaries.

Note: Totals do not necessarily equal the sums of rounded components.

The total assets of the trust fund amounted to $35,206 million on September 30, 1997. During fiscal year 1998, total revenue amounted to $81,955 million, and total disbursements were $76,272 million. Total assets thus increased $5,683 million during the year to $40,889 million on September 30, 1998.

Of the total revenue, $19,427 million represented premium payments by (or on behalf of) aged and disabled enrollees, an increase of 1.5 percent over the amount of $19,141 million for the preceding year. This increase resulted primarily from the growth of the number of persons enrolled in the SMI program.

Contributions received from the general fund of the treasury amounted to $59,919 million, which accounted for 73.1 percent of total revenue. The remaining $2,608 million of revenue consisted almost entirely of interest on the investments of the trust fund.

Of the $76,272 million in total disbursements, $74,837 million represented: (1) benefits paid directly from the trust fund for health services covered under Title XVIII of the Social Security Act and (2) costs of experiments and demonstration projects in providing health care services. Net benefit payments were made up of $74,889 million of gross benefit payments less $52 million of recoveries from fraud and abuse control activities.

The remaining $1,434 million of disbursements was for administrative expenses. Administrative expenses are allocated and charged to each of the four trust funds—Old–Age and Survivors Insurance (OASI), Disability Insurance (DI), HI, and SMI—on the basis of provisional estimates. Similarly, the expenses of administering other programs of HCFA are also allocated and charged to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, the allocations of administrative expenses and costs of construction for prior periods are adjusted by interfund transfers. This adjustment includes transfers between the HI and SMI trust funds and the program management general fund account, with appropriate interest allowances.

Table II.C2 compares the actual experience in fiscal year 1998 with the estimates presented in the 1997 and 1998 annual reports. The estimates for premiums from enrollees and government contributions in the 1997 and 1998 reports were very close to actual experience. However actual SMI benefit payments in fiscal year 1998 were

significantly lower than estimated in the 1997 annual report. This occurred in part as a result of lower increases in allowed fees due to lower general and medical inflation. In addition, actual benefit payments reflected lower increases in the volume and intensity of services used than had been estimated. Actual benefit payments were somewhat lower than the estimates in the 1998 report for similar reasons.

Table II.C2.—Comparison of Actual and Estimated Operations of the SMI Trust Fund, Fiscal Year 1998
[Dollar amounts in millions]

Item	Actual amount	Comparison of actual experience with estimates for fiscal year 1998 published in–			
		1998 report		1997 report	
		Estimated amount[1]	Actual as percentage of estimate	Estimated amount[1]	Actual as percentage of estimate
Premiums from enrollees	$19,427	$19,241	101	$20,125	97
Government contributions	59,919	59,375	101	62,131	96
Benefit payments	74,837	76,824	97	80,701	93

[1]Under the intermediate assumptions.

Table II.C3 shows a comparison of the total assets of the SMI trust fund and their distribution at the end of fiscal year 1997 and 1998. The assets of the fund at the end of 1997 totaled $35,206 million, consisting of $34,464 million in the form of obligations of the U.S. Government, and an undisbursed balance of $741 million. The assets of the trust fund at the end of 1998 totaled $40,889 million, consisting of $39,502 million in the form of obligations of the U.S. Government and an undisbursed balance of $1,387 million. A comparison of assets of the trust fund with liabilities for incurred but unpaid benefits (and related administrative expenses) is shown in section II.E.

Table II.C3.—Assets of the SMI Trust Fund at the End of Fiscal Years 1997 and 1998[1]

	September 30, 1997	September 30, 1998
Investments in public-debt obligations sold only to this fund (special issues):		
Certificates of Indebtedness:		
5 3/4-percent, 1999	——	$1,580,765,000.00
5 3/8-percent, 1999	——	1,845,192,000.00
6 3/4-percent, 1998	$879,134,000.00	——
6 5/8-percent, 1998	1,637,922,000.00	——
Bonds:		
5 7/8-percent, 2013	——	6,415,109,000.00
6 1/4-percent, 2003-2008	2,674,644,000.00	2,674,644,000.00
6 7/8-percent, 1999-2012	9,606,392,000.00	9,038,783,000.00
7-percent, 1998-2011	10,555,686,000.00	8,836,477,000.00
7 1/4-percent, 2003-2009	1,853,149,000.00	1,853,149,000.00
7 3/8-percent, 2003-2007	1,590,285,000.00	1,590,285,000.00
8 1/8-percent, 2003-2006	1,900,955,000.00	1,900,955,000.00
8 3/4-percent, 2002-2005	3,766,224,000.00	3,766,224,000.00
Total investments in public-debt obligations	34,464,391,000.00	39,501,583,000.00
Undisbursed balance	741,315,993.38	1,387,198,024.56
Total assets	35,205,706,993.38	40,888,781,024.56

[1]The assets are carried at par value, which is the same as book value.

The effective annual rate of interest earned by the assets of the SMI trust fund for the 12 months ending on December 31, 1998 was 6.8 percent. Interest on special issues is paid semiannually on June 30 and December 31. The interest rate on special issues purchased by the trust fund in June 1998 was 5.875 percent, payable semiannually.

D. EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND

Future operations of the trust fund are projected using the Trustees' economic and demographic assumptions, as detailed in the OASDI Trustees Report, as well as other assumptions unique to the SMI program. Section II.F presents an explanation of the effects of the Trustees' intermediate assumptions and the other assumptions unique to SMI on the estimates in this report. Although financing rates have been set only through December 31, 1999, it has been assumed that financing for future periods will be set according to the statutory provisions described in section II.B. In addition, benefit expenditure estimates assume current statutory provisions are maintained.

Table II.D1 shows the estimated operations of the SMI trust fund under the intermediate assumptions on a fiscal-year basis through 2008. Table II.D2 shows the corresponding development on a calendar-year basis. These estimated operations reflect the transfer of certain home health services from the HI program to the SMI program, as specified by the Balanced Budget Act of 1997. For individuals enrolled in both HI and SMI, the HI program will cover the first 100 home health visits following a hospital or skilled nursing facility stay of at least 3 days, and coverage of all other home health services for these individuals will be transferred from the HI program to the SMI program. However, for the 6-year period 1998 through 2003, sums of money will also be transferred from the HI trust fund to the SMI trust fund to phase in the financial impact of the transfer of these services. The sums of money to be transferred will be determined so that the net additional expenditures of the SMI trust fund will be 1/6 of the cost of the services being transferred in 1998, incremented by an additional 1/6 of the cost each year thereafter. The benefit payments for 1998 through 2003 shown in tables II.D1 and II.D2 and elsewhere in this section and in section II.E represent aggregate SMI benefit payments less the funds transferred from the HI trust fund.

Table II.D1.—Operations of the SMI Trust Fund (Cash Basis) During Fiscal Years 1970-2008

[In millions]

	Income				Disbursements			
Fiscal year[1]	Premium from enrollees	Government contributions[2]	Interest and other income[3]	Total income	Benefit payments	Administrative expenses	Total disbursements	Balance at end of year[4]
Historical Data:								
1970	$936	$928	$12	$1,876	$1,979	$217	$2,196	$57
1975	1,887	2,330	105	4,322	3,765	405	4,170	1,424
1980	2,928	6,932	415	10,275	10,144	593	10,737	4,532
1985	5,524	17,898	1,155	24,577	21,808	922	22,730	10,646
1990	11,494[5]	33,210	1,434[5]	46,138[5]	41,498	1,524[5]	43,022[5]	14,527[5]
1991	11,807	34,730	1,629	48,166	45,514	1,505	47,019	15,675
1992	12,748	38,684	1,717	53,149	48,627	1,661	50,288	18,535
1993	14,683	44,227	1,889	60,799	54,214[6]	1,845	56,059	23,276
1994	16,895	38,355	2,118	57,368	58,006	1,718	59,724	20,919
1995	19,244	36,988	1,937	58,169	63,491	1,722	65,213	13,874
1996	18,931	61,702	1,392	82,025	67,176	1,771	68,946	26,953
1997	19,141	59,471	2,193	80,806	71,133	1,420	72,553	35,206
1998	19,427	59,919	2,609	81,955	74,837[7]	1,435	76,272	40,889
Intermediate Estimates:								
1999	19,947	61,879	2,794	84,620	81,691[7]	1,435	83,126	42,383
2000	21,308	68,208	2,790	92,306	93,243[7]	1,538	94,781	39,907
2001	23,127	74,544	2,709	100,380	100,340[7]	1,584	101,924	38,364
2002	25,212	81,441	2,672	109,325	105,837[7]	1,636	107,473	40,215
2003	27,688	89,378	2,675	119,741	117,214[7]	1,693	118,907	41,050
2004	30,273	95,480	2,717	128,470	125,871[7]	1,755	127,626	41,893
2005	32,494	101,928	2,762	137,184	137,056	1,823	138,878	40,199
2006	35,130	110,092	2,833	148,055	141,607	1,896	143,503	44,751
2007	38,184	119,626	2,977	160,787	155,619	1,974	157,593	47,945
2008	41,411	129,703	3,192	174,307	168,472	2,057	170,529	51,723

[1]Fiscal years 1970 and 1975 consist of the 12 months ending on June 30 of each year; fiscal years 1980 and later consist of the 12 months ending on September 30 of each year.

[2]General fund matching payments, plus certain interest-adjustment items.

[3]Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and other miscellaneous income.

[4]The financial status of the program depends on both the assets and the liabilities of the program (see table II.E2).

[5]Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

[6]Includes the impact of the transfer to the HI trust fund of the SMI catastrophic coverage reserve fund on March 31, 1993 as specified in Public Law 102-394. Actual benefit payments for 1993 were $52,409 million and the amount transferred was $1,805 million.

[7]Benefit payments less monies transferred from the HI trust fund for home health agency costs, as provided for by the Balanced Budget Act of 1997.

Note: Totals do not necessarily equal the sums of rounded components.

Table II.D2.—Operations of the SMI Trust Fund (Cash Basis) During Calendar Years 1970-2008
[In millions]

Calendar year	Income				Disbursements			Balance at end of year[3]
	Premium from enrollees	Government contributions[1]	Interest and other income[2]	Total income	Benefit payments	Administrative expenses	Total disbursements	
Historical Data:								
1970	$1,096	$1,093	$12	$2,201	$1,975	$237	$2,212	$188
1975	1,918	2,648	107	4,673	4,273	462	4,735	1,444
1980	3,011	7,455	408	10,874	10,635	610	11,245	4,530
1985	5,613	18,250	1,243	25,106	22,947	933	23,880	10,924
1990	11,320	33,035	1,558	45,913	42,468	1,519	43,987	15,482
1991	11,934	37,602	1,688	51,224	47,336	1,541	48,877	17,828
1992	14,077[4]	41,359[4]	1,801	57,237	49,260	1,570	50,830	24,235
1993	14,193[4]	41,465[4]	2,021	57,679	55,784[5]	2,000	57,784	24,131
1994	17,386	36,203	2,018	55,607	58,618	1,699	60,317	19,422
1995	19,717	39,007	1,582	60,306	64,972	1,627	66,599	13,130
1996	18,763	65,035	1,811	85,609	68,598	1,810	70,408	28,332
1997	19,289	60,171	2,464	81,924	72,757	1,368	74,124	36,131
1998	20,933[6]	64,068[6]	2,711	87,711	76,125[7]	1,505	77,630	46,212
Intermediate Estimates:								
1999	18,655[6]	58,096[6]	2,821	79,572	83,403[7]	1,549	84,953	40,832
2000	21,689	70,009	2,779	94,477	95,666[7]	1,596	97,261	38,047
2001	23,607	76,056	2,686	102,348	101,539[7]	1,650	103,188	37,207
2002	25,747	83,236	2,668	111,650	110,098[7]	1,708	111,805	37,052
2003	28,335	91,426	2,677	122,438	119,448[7]	1,771	121,219	38,272
2004	30,919	96,831	2,730	130,480	128,035	1,840	129,875	38,877
2005	33,019	103,627	2,773	139,419	136,799	1,915	138,715	39,581
2006	35,834	112,247	2,854	150,934	147,169	1,994	149,163	41,352
2007	38,968	122,086	3,018	164,071	158,882	2,078	160,960	44,464
2008	42,226	132,242	3,250	177,719	172,071	2,167	174,238	47,944

[1]See footnote 2 of table II.D1.
[2]See footnote 3 of table II.D1.
[3]See footnote 4 of table II.D1.
[4]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January, 1993 occurred on December 31, 1992. Consequently, the SMI premiums withheld from the checks ($1,089 million) and the general revenue contributions ($3,175 million) were added to the SMI trust fund on December 31, 1992. These amounts are excluded from the premium income and general revenue income for 1993.
[5]Includes the impact of the transfer to the HI trust fund of the SMI catastrophic coverage reserve fund on March 31, 1993 as specified in Public Law 102-394. Actual benefit payments for 1993 were $53,979 million and the amount transferred was $1,805 million.
[6]Delivery of benefit checks normally due January, 1999 occurred on December 31, 1998. Consequently, the SMI premiums withheld from the checks ($1,512 million) and the associated general revenue contributions ($4,711 million) were added to the SMI trust fund on December 31, 1998. These amounts are excluded from the premium income and general revenue income for 1999 (refer to footnote 4).
[7]See footnote 7 of table II.D1.

Note: Totals do not necessarily equal the sum of rounded components.

Table II.D2 indicates an unusually large increase in SMI trust fund assets during calendar year 1998, followed by an unusually large

decrease. This apparent anomaly results from a special provision governing the timing of Social Security benefit checks. In particular, benefits for the month of December were delivered on December 31, 1998 instead of their regularly scheduled delivery date of January 3, 1999, a Sunday.[1] Consequently, the SMI premiums withheld from the checks ($1,512 million) and the associated general revenue contributions ($4,711 million) were added to the fund on December 31, 1998, causing the unusual pattern of asset growth and decline described above. Correcting for this abnormality, the adjusted fund balance would be $40.0 billion at the end of calendar year 1998.

The beneficiary premiums and actuarial rates for calendar year 1999 were promulgated with specific margins to decrease slightly the size of the SMI trust fund, which is currently well above levels considered adequate for contingency reserve purposes. However, subsequent actual program expenditures are proving to be somewhat lower than expected when the 1999 financing was established. As a result, the fund is estimated to increase slightly during 1999 (relative to the adjusted fund balance described above), reaching an estimated $40.8 billion by the end of the year, and then to decrease to $38.0 billion by the end of 2000. For subsequent years, financing margins are assumed to be set in such a way that the trust fund assets will gradually decline to the preferred contingency level in 2006 and then maintain that level thereafter.

The amount and rate of growth of benefit payments have been a source of some concern for many years. In table II.D3, amounts of payments are considered in the aggregate, on a per capita basis, and relative to the GDP. Rates of growth are shown historically and for the next 10 years, based on the intermediate set of assumptions. During 1998, program benefits grew 4.6 percent on an aggregate basis, grew 3.9 percent on a per capita basis, and decreased from 0.90 percent to 0.89 percent of GDP. These rates of growth are among the lowest ever experienced by the SMI program. For 1999, the program is expected to grow 9.6 percent on an aggregate basis, to grow 8.8 percent on a per capita basis, and to increase from 0.89 to 0.94 percent of GDP. These larger increases are due primarily to the provisions included in the Balanced Budget Act of 1997.

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[1]Section 708 of the Social Security Act modifies the delivery day of Social Security checks when the regularly designated delivery day falls on a Saturday, Sunday, or a legal public holiday.

Table II.D3.—Growth in Total Benefits Under the SMI Program (Cash Basis) Through December 31, 2008

Calendar year	Aggregate benefits (millions)	Percent change	Per capita benefits	Percent change	SMI benefits as a percent of GDP
Historical Data:					
1970	$1,975	5.9	$101.30	3.5	0.19
1975	4,273	28.8	179.96	24.6	0.26
1980	10,635	22.1	389.87	19.3	0.38
1985	22,947	16.7	768.26	14.5	0.55
1990	42,468	10.9	1,305.12	9.2	0.74
1991	47,336	11.5	1,426.91	9.3	0.80
1992	49,260	4.1	1,454.85	2.0	0.79
1993	53,979	9.6	1,562.65	7.4	0.82
1994	58,618	8.6	1,669.87	6.9	0.84
1995	64,973	10.8	1,823.15	9.2	0.89
1996	68,599	5.6	1,901.88	4.3	0.90
1997	72,756	6.1	1,998.68	5.1	0.90
1998	76,125[1]	4.6	2,074.65	3.9	0.89
Intermediate Estimates:					
1999	83,403[1]	9.6	2,258.03	8.8	0.94
2000	95,666[1]	14.7	2,567.11	13.7	1.04
2001	101,539[1]	6.1	2,669.46	5.2	1.06
2002	110,098[1]	8.4	2,899.25	7.4	1.10
2003	119,448[1]	8.5	3,111.05	7.3	1.14
2004	128,035	7.2	3,294.56	5.9	1.16
2005	136,799	6.8	3,475.22	5.5	1.18
2006	147,169	7.6	3,686.45	6.1	1.21
2007	158,882	8.0	3,914.20	6.2	1.24
2008	172,071	8.3	4,156.51	6.2	1.28

[1]See footnote 7 of table II.D1.

The estimated expenditures in the 1999 annual report are significantly lower than those in the 1998 annual report. The lower estimates are a result of (1) actual benefit payments for 1998 being lower than the estimates in the 1998 annual report, (2) the recent experience indicating that "residual" rates of growth for some SMI services (reflecting utilization and intensity growth) have slowed from those expected in the 1998 annual report, and (3) lower assumed rates of both general and medical inflation for the future. The reduced expenditures for 1998 provide for a lower projection base and, therefore, estimated expenditures for subsequent years would be lower even if the same growth rates were assumed as in the 1998 annual report. Moreover, the slower growth rates assumed for some services in the 1999 annual report further reduce estimated expenditures. However, in spite of the lower estimates in the 1999 annual report, program expenditures are still expected to increase faster than the GDP, as indicated in table II.D3.

Since future economic, demographic, and health care usage and cost experience may vary considerably from the intermediate assumptions

on which the preceding cost estimates were based, estimates have also been prepared on the basis of two alternative sets of assumptions: low cost and high cost. The estimated operations of the SMI trust fund during 1998-2008 are summarized in table II.D4 for all three alternatives. The assumptions underlying the intermediate assumptions are presented in substantial detail in section II.F. The assumptions used in preparing estimates under the low cost and high cost alternatives are also summarized in that section.

Table II.D4.—Estimated Operations of the SMI Trust Fund (Cash Basis) Under Alternative Sets of Assumptions, Calendar Years 1998-2008
[In billions]

Calendar year	Premiums from enrollees	Other income[1]	Total income	Total disbursements	Balance in fund at end of year
Intermediate:					
1998[2]	$20.9[3]	$66.8[3]	$87.7	$77.6[4]	$46.2
1999	18.7[3]	60.9[3]	79.6	85.0[4]	40.8
2000	21.7	72.8	94.5	97.3[4]	38.0
2001	23.6	78.7	102.3	103.2[4]	37.2
2002	25.7	85.9	111.7	111.8[4]	37.1
2003	28.3	94.1	122.4	121.2[4]	38.3
2004	30.9	99.6	130.5	129.9	38.9
2005	33.0	106.4	139.4	138.7	39.6
2006	35.8	115.1	150.9	149.2	41.4
2007	39.0	125.1	164.1	161.0	44.5
2008	42.2	135.5	177.7	174.2	47.9
Low Cost:					
1998[2]	20.9[3]	66.8[3]	87.7	77.6[4]	46.2
1999	18.7[3]	60.9[3]	79.6	83.8[4]	42.0
2000	20.9	70.6	91.5	94.3[4]	39.2
2001	22.3	74.9	97.3	98.1[4]	38.4
2002	23.9	80.3	104.2	104.3[4]	38.3
2003	25.8	86.5	112.3	111.0[4]	39.6
2004	27.6	89.5	117.1	116.4	40.2
2005	28.9	93.3	122.2	121.5	40.9
2006	30.3	98.0	128.4	127.6	41.7
2007	32.0	103.2	135.2	134.4	42.6
2008	33.8	109.0	142.9	141.9	43.6
High Cost:					
1998[2]	20.9[3]	66.8[3]	87.7	77.6[4]	46.2
1999	18.7[3]	60.9[3]	79.6	86.8[4]	39.0
2000	22.5	75.2	97.7	100.4[4]	36.2
2001	26.0	86.0	112.0	112.8[4]	35.4
2002	29.6	98.0	127.6	127.7[4]	35.3
2003	32.6	107.5	140.1	137.5[4]	37.9
2004	37.3	119.5	156.8	153.4	41.2
2005	41.2	132.1	173.4	169.6	45.0
2006	45.6	145.9	191.5	187.2	49.3
2007	50.5	161.5	212.1	207.1	54.2
2008	56.1	179.4	235.6	229.9	59.9

[1]Other income contains government contributions and interest.
[2]Figures for 1998 represent actual experience.
[3]See footnote 6 of table II.D.2.
[4]Disbursements include benefit payments and administrative expenses less monies transferred from the HI trust fund for home health agency costs, as provided for by Public Law 105-33.

Note: Totals do not necessarily equal the sums of rounded components.

The three sets of assumptions were selected in order to indicate the general range in which the cost of the program reasonably might be expected to fall. The low and high cost alternatives provide for a fairly wide range of possible experience. Actual experience is expected to fall within the range, but no assurance can be given that this will be the case, particularly in light of the wide variations in experience that have occurred since the beginning of the program.

SMI expenditures are estimated to grow significantly faster than the GDP under the intermediate and high-cost assumptions. Based on the low-cost assumptions, expenditures would initially increase faster than GDP but only for the first few years. Thereafter, within the short-range period, costs would grow at approximately the same rate as the GDP.

The alternative projections shown in table II.D4 illustrate two important aspects of the financial operations of the SMI trust fund:

- First, despite the widely differing assumptions underlying the three alternatives, the balance between SMI income and disbursements remains relatively stable. Under the low cost assumptions, for example, by 2008 both income and disbursements would be around 20 percent lower than projected under the intermediate assumptions. The corresponding amounts under the high cost assumptions would both be around 30 percent higher than the intermediate estimates.

  This result occurs because the premiums and general revenue contributions underlying the financing for the SMI program are reestablished annually, to match each year's anticipated incurred benefit costs and other expenditures. Thus, program income will automatically track program expenditures fairly closely regardless of the specific economic and other conditions.

- Second, as a result of the close matching of income and disbursements described above, projected trust fund assets show gradual, steady growth under all three sets of assumptions. The annual adjustment of premiums and general revenue contributions permits the maintenance of a trust fund balance that, while relatively small, is sufficient to guard against chance fluctuations.

Table II.D5 shows the estimated incurred disbursements of the SMI program under the intermediate assumptions expressed as a percentage of GDP, for selected years over the calendar-year period 1998-2070. These estimated incurred disbursements are for benefit payments and administrative expenses combined, unlike the values in table II.D3 which only express benefit payments on a cash basis as a percentage of GDP. The 75-year projection period fully allows for the presentation of future trends that reasonably may be expected to occur, such as the impact of a large increase in enrollees after the turn of the century. This increase will occur because the relatively large number of persons born during the period between the end of World War II and the mid-1960's (known as the "baby boom") will reach retirement age and begin to receive benefits.

Increases in the costs per enrollee during the initial 25-year period are assumed to decline gradually in the last 12 years of that period to the same growth rate as GDP per capita and then to continue at the same rate as GDP per capita in the last 50 years. Therefore, changes in the last 50 years of the period are attributable only to demographic changes in the population. Given the historical experience of SMI costs per enrollee generally increasing faster than GDP per capita, this assumption may be considered optimistic. However, assuming a continuation of the historical trend for another 75 years would result in an SMI program so large as a percent of GDP that it would be implausible given other demands on those resources. Based on these assumptions, incurred SMI disbursements as a percentage of GDP would increase rapidly from 0.93 percent in 1998 to 2.53 percent in 2035, decrease slightly to 2.46 percent in 2050, and then would increase to 2.65 percent in 2070.

Table II.D5.—SMI Disbursements (Incurred Basis) as a Percent of the Gross Domestic Product[1]

Calendar year	SMI Disbursements as a percent of GDP
1998	0.93
1999	0.98
2000	1.05
2005	1.21
2010	1.38
2015	1.68
2020	1.97
2025	2.23
2030	2.43
2035	2.53
2040	2.53
2045	2.49
2050	2.46
2055	2.47
2060	2.54
2065	2.61
2070	2.65

[1]Disbursements are the sum of benefit payments and administrative expenses.

E. ACTUARIAL STATUS OF THE TRUST FUND

1. Actuarial Status of the Supplementary Medical Insurance Program

The traditional concept of financial adequacy, as it applies to the SMI program, is closely related to the concept as it applies to many private group insurance plans. The SMI program is somewhat similar to yearly renewable term insurance, with financing from premium income paid by the enrollees and from income contributed from general revenue by the federal government. Consequently, the income to the program during a 12-month period for which financing is being established should be sufficient to cover the costs of services expected to be rendered during that period (including associated administrative costs), even though payment for some of these services will not be made until after the close of the period. The portion of income required to cover those benefits not paid until after the close of the year is added to the trust fund. Thus, the assets in the trust fund at any time should be no less than the costs of the benefits and the administrative expenses incurred but not yet paid.

The law requires the Secretary of HHS to establish income for a calendar year on the basis of incurred costs (including associated administrative costs) for that year. Financing on an incurred basis means that income should be sufficient to cover the cost of services

rendered during the period. However, since the income per enrollee (premium plus Government contribution) is established prospectively, it is subject to projection error. Additionally, legislation enacted after the financing has been established but effective for the period for which financing has been set may affect program costs. As a result, the income to the program may not be equal to incurred costs; therefore, trust fund assets should be maintained at a level which is adequate to cover not only the value of incurred but unpaid expenses but also a reasonable degree of variation between actual and projected costs (in case actual costs exceed projected).

The actuarial status or financial adequacy of the SMI program is traditionally evaluated over the period for which the enrollee premium rates and level of general revenue financing have been established. The primary tests are that: (1) the assets and income for years for which financing has been established should be sufficient to meet the projected benefits and associated administrative expenses incurred for that period and (2) the assets should be sufficient to cover projected liabilities as of the end of the period that have not yet been paid. If these adequacy tests are not met, the program can still continue to operate if the trust fund remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that costs under the program will be higher than assumed, assets should be sufficient to include contingency levels to cover a reasonable degree of variation between actual and projected costs.

The adequacy of contingency reserves for accommodating higher-than-expected costs is measured by the excess of assets over liabilities. An appropriate target level for this excess depends on numerous factors. The most important of these factors are: (1) the variation in the projection factors through the period for which the financing has been established and (2) the expected relationship between incurred and cash expenditures. Ongoing analysis is made of the former as trends in the differences vary over time.

2. Incurred Experience of the Supplementary Medical Insurance Program

The tests of financial adequacy for the SMI program noted above rely on the incurred experience of the program. Cash disbursements for benefits and administrative expenses by themselves are misleading, due to the relatively large liabilities outstanding at any time for benefits and processing costs. Outstanding liabilities result from the lag between the

time that services are performed and the time that payments for them are made.

The experience of the program is substantially more difficult to determine on an incurred basis than on a cash basis. Payment for some services is reported only on a cash basis, and the incurred experience must be inferred from the cash payment information. For recent time periods, the tabulations of bills are incomplete due to normal processing delays.

Table II.E1 shows the estimated transactions of the trust fund on an incurred basis. For the reasons stated above, the incurred experience must be viewed as an estimate even for historical years. Various tests, however, such as the comparison to cash outlay data, assure that the estimates are reasonably close.

Table II.E1.—Estimated Income and Disbursements Incurred Under the SMI Program for Financing Periods Through December 31, 1999

[In millions]

	Income				Disbursements			
Financing period	Premium from enrollees	Government contributions	Interest and other income	Total income	Benefit payments	Administrative expenses	Total disbursements	Net operations in year
Historical Data:								
12-month period ending June 30,								
1970	$936	$936	$12	$1,884	$1,928	$213	$2,141	-257
1975	1,887	2,396	105	4,388	3,957	438	4,395	-7
1980	2,823	6,627	421	9,871	9,840	645	10,485	-614
Calendar year								
1985	5,613	18,243	1,248	25,104	22,750	986	23,736	1,368
1990	11,320	33,035	1,558	45,913	42,578	1,541	44,119	1,794
1991	11,934	37,558	1,732	51,224	46,375	1,572	47,947	3,277
1992	12,988	38,158	1,827	52,973	49,414	1,690	51,104	1,869
1993	15,282	44,640	2,021	61,943	55,156[1]	1,713	56,869[1]	5,074
1994	17,386	36,203	2,018	55,607	59,137	1,620	60,757	-5,150
1995	19,717	45,743	1,739	67,199	64,863	1,607	66,470	729
1996	18,763	58,068	1,885	78,716	68,906	1,807	70,713	8,003
1997	19,289	60,169	2,466	81,924	74,057	1,367	75,424	6,500
1998	19,421	59,357	2,711	81,489	77,624[2]	1,505	79,129	2,360
Intermediate Estimates:								
1999	20,167	62,807	2,821	85,795	85,517[2]	1,549	87,066	-1,271

[1]Includes the impact of the transfer to the HI trust fund of the SMI catastrophic coverage reserve fund on March 31, 1993 as specified in Public Law 102-394. Estimated incurred payments for 1993 are $53,351 million and the amount transferred was $1,805 million.

[2]See footnote 7 of table II.D1.

3. Accumulated Excess of Assets Over Liabilities

The liability outstanding at any time, for the cost of services performed for which no payment has been made, is referred to as "benefits incurred but unpaid." Estimates of the amount of benefits incurred but unpaid as of the end of each financing period, and of the administrative expenses related to processing these benefits, appear in table II.E2. In some years, program assets have not been as large as liabilities. Nonetheless, the fund has remained positive, allowing claims to be paid.

Table II.E2.—Summary of Estimated Assets and Liabilities of the SMI Program as of the End of the Financing Period, for Periods through December 31, 1999

[Dollar amounts in millions]

	Balance in trust fund	Government contributions due but unpaid	Total assets	Benefits incurred but unpaid	Administrative costs incurred but unpaid	Total liabilities	Excess of assets over liabilities	Ratio[1]
Historical Data:								
As of June 30,								
1970	$57	$15	$72	$567	$0	$567	-495	-0.21
1975	1,424	67	1,491	1,257	14	1,271	220	0.04
1980	4,657	0	4,657	2,621	188	2,809	1,848	0.15
As of December 31,								
1985	10,924	0	10,924	3,142	-38	3,104	7,820	0.28
1990	15,482	0	15,482	4,062	19	4,081	11,401	0.24
1991	17,828	0	17,828	3,101	50	3,151	14,677	0.29
1992	24,236[2]	0	24,236[2]	3,255	170	7,689[2]	16,547	0.30
1993	24,131	0	24,131	2,627	-117	2,510	21,621	0.36
1994	19,422	0	19,422	3,146	-196	2,950	16,472	0.25
1995	13,130	6,893[3]	20,023	3,036	-216	2,820	17,203	0.24
1996	28,332	0	28,332	3,343	-219	3,124	25,208	0.32
1997	36,132	0	36,132	6,901	-220	6,681	29,451	0.37
1998	46,213[4]	0	46,213[4]	8,400	-220	14,403[4]	31,810	0.37
Intermediate Estimates:								
1999	40,833	0	40,833	10,514	-220	10,294	30,539	0.32

[1]Ratio of the excess of assets over liabilities to the following year's total incurred expenditures.

[2]Section 708 of the Social Security Act modifies the provisions for the delivery of Social Security benefit checks when the regularly designated day falls on a Saturday, Sunday, or legal public holiday. Delivery of benefit checks normally due January, 1993 occurred on December 31, 1992. Consequently, the SMI premiums withheld from the checks ($1,089 million) and the general revenue matching contributions ($3,175 million) were added to the SMI trust fund on December 31, 1992 and were included in the liabilities.

[3]This amount includes both the principal of $6,736 million and the accumulated interest through December 31, 1995 for the shortfall in the fiscal year 1995 appropriation for Government contributions. Normally, this transfer would have been made on December 31, 1995 and, therefore, would have been reflected in the trust fund balance. However, due to absence of funding, the transfer of the principal and the appropriate interest was made on March 1, 1996.

[4]Delivery of benefit checks normally due January, 1999 occurred on December 31, 1998. Consequently, the SMI premiums withheld from the checks ($1,512 million) and the general revenue matching contributions ($4,711 million) were added to the SMI trust fund on December 31, 1998 and were included in the liabilities (see footnote 2).

Program financing has been established through December 31, 1999. The financing for calendar year 1999 was designed with specific margins to slightly reduce the excess of assets over liabilities as a percent of incurred expenditures for the following year. As a result, the calendar year 1999 incurred income is expected to be less than incurred disbursements by $1,271 million, as shown in table II.E1, and the excess of assets over liabilities is expected to decrease from $31,810 million at the end of December 1998 to $30,539 million at the end of December 1999, under the intermediate assumptions, as shown in table II.E2. This excess as a percent of incurred expenditures for the following year is expected to decrease from 37 percent as of December 31, 1998 to 32 percent as of December 31, 1999.

4. Sensitivity Testing

Some of the assumptions underlying the estimates presented in this report are highly uncertain, and variations in these assumptions would have a substantial impact on estimated expenditures. Since the financing rates are set prospectively, the actuarial status of the SMI program could be affected by variations in these assumptions. In order to test the status of the program under varying assumptions, a lower growth range projection and an upper growth range projection were prepared by varying these key assumptions through the period for which the financing has been set. The lower and upper growth range alternative sets of assumptions are intended to reflect growth rates for the various components of program costs which are more favorable and adverse, respectively, than those of the intermediate assumptions. These two alternative sets of assumptions are reasonable in light of the nature and historical experience of the program. As such, they provide a range of financial outcomes within which the actual experience of the program might reasonably be expected to fall. The values for the lower and upper growth range assumptions were determined from a statistical analysis of the historical variation in the respective increase factors.

This sensitivity analysis differs from the low cost and high cost projections discussed in the section II.D. This analysis examines the variation in the projection factors through the period for which the financing has been established (1999 for this report). The low cost and high cost projections begin the variation in program growth starting with the preceding year (1998) and continue such variation throughout the projection period.

Table II.E3 indicates that, under the lower growth range scenario, trust fund assets would exceed liabilities at the end of December 1999 by a

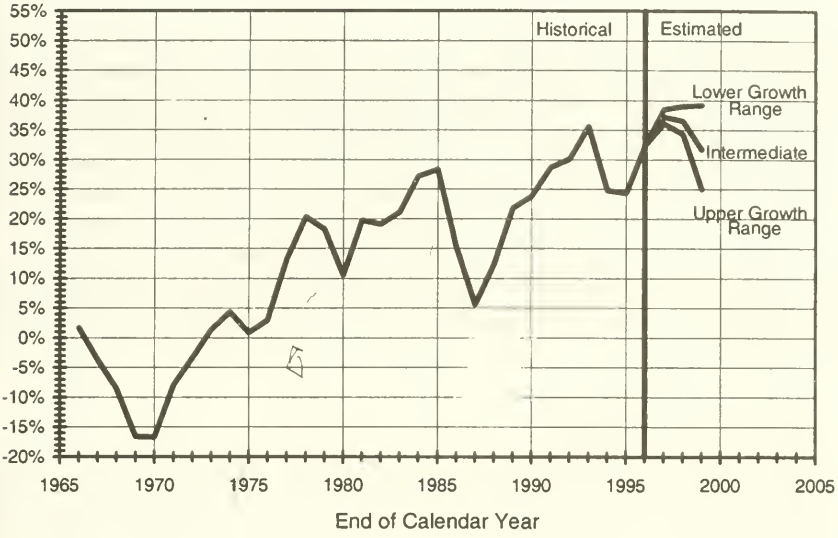
wide margin, equivalent to 39.2 percent of the following year's incurred expenditures. If this lower growth range scenario were actually to materialize, then subsequent financing rates would be adjusted downward in order to lower the excess of assets over liabilities to an appropriate level to maintain the adequacy of the trust fund. Under the upper growth range scenario, trust fund assets would still exceed liabilities by the end of December 1999, dropping to a level of 25.0 percent of the following year's incurred expenditures. Therefore, even if these upper range growth rates were to occur, assets would still be sufficient to cover outstanding liabilities. Figure II.E1 shows this ratio for historical years and for projected years under the intermediate scenario, as well as the lower growth range (optimistic) and the upper growth range (pessimistic) cost sensitivity scenarios.

Table II.E3.—Actuarial Status of the SMI Trust Fund Under Three Cost Sensitivity Scenarios for Financing Periods Through December 31, 1999

As of December 31,	1997	1998	1999
Intermediate Scenario:			
Actuarial Status (in millions):			
Assets	$36,132	$46,213	$40,833
Liabilities	6,681	14,403	10,294
Assets Less Liabilities	$29,451	$31,810	$30,539
Ratio (in percent)[1]	37.2	36.5	31.7
Low Range Scenario:			
Actuarial Status (in millions):			
Assets	$36,132	$46,213	$45,381
Liabilities	6,681	14,099	10,030
Assets Less Liabilities	$29,451	$32,114	$35,351
Ratio (in percent)[1]	38.4	39.0	39.2
Upper Range Scenario:			
Actuarial Status (in millions):			
Assets	$36,132	$46,213	$36,285
Liabilities	6,681	14,707	10,557
Assets Less Liabilities	$29,451	$31,506	$25,728
Ratio (in percent)[1]	36.1	34.3	25.0

[1]Ratio of assets less liabilities at the end of the year to the total incurred expenditures during the following year, expressed as a percent.

Figure II.E1.—Actuarial Status of the SMI Trust Fund Through Calendar Year 1999



Note: The actuarial status of the SMI trust fund is measured by the ratio of (i) assets minus liabilities at the end of the year to (ii) the following year's incurred expenditures.

F. ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

This section describes the basic methodology and assumptions used in the estimates for the SMI program under the intermediate assumptions. In addition, projections of program costs under two alternative sets of assumptions are presented. The methodology and data sources underlying the SMI projections in this year's report have been substantially modified and enhanced. Consequently, the discussion in this section and the data and estimates shown differ from the corresponding material in prior reports.

1. Assumptions

The economic and demographic assumptions underlying the projections shown in this report are consistent with those in the 1999 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. These assumptions are described in more detail in that report.

2. Program Cost Projection Methodology

Estimates under the intermediate assumptions are prepared by establishing the allowed charges or costs incurred per enrollee, for each category of enrollee and for each type of service, for a recent year to serve as a projection base and then projecting these charges through the estimation period. The per enrollee charges are then converted to reimbursement amounts by subtracting the per enrollee values of the deductible and coinsurance. Aggregate reimbursement amounts are calculated by multiplying the per enrollee reimbursement amounts by the projected enrollment. In order to estimate cash disbursements, an allowance is made for the delay between receipt of service and payment therefor.

a. Projection Base

To establish a suitable base from which to project the future costs of the program, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. To do this, payments to providers must be attributed to dates of service, rather than to payment dates. In addition, the nonrecurring effects of any changes in regulations, legislation, or administration of the program and of any items affecting only the timing and flow of payments to providers must be eliminated. As a result, the rates of increase in the incurred cost of the program differ from the increases in cash disbursements.

(1) Carrier Services

Reimbursement amounts for physician services, durable medical equipment (DME), laboratory tests performed in physician offices and independent laboratories, and other services such as free-standing ambulatory surgical center facility services, ambulance, and supplies are paid through organizations acting for HCFA, referred to as "carriers." The carriers determine whether billed services are covered under the program and determine the allowed charges for covered services. A record of the allowed charges, the applicable deductible and coinsurance, and the amount reimbursed after reduction for coinsurance and the deductible is transmitted to HCFA.

The data is tabulated on an incurred basis. This is necessary to meet the statutory requirement that the program be financed on this basis. As a check on the validity of the projection base, incurred reimbursement amounts are compared with cash expenditures reported

by the carriers through an independent reporting system. In a health care program with continuously increasing incurred reimbursement amounts, cash payments are expected to be slightly lower than incurred expenses (except in the first year of coverage of a service or group of beneficiaries, when the difference should be substantial). These differences between cash and incurred reimbursement amounts occur because of the lag between receipt of services and payment therefor.

(2) Intermediary Services

Reimbursement amounts for institutional services under the SMI program are paid by the same "fiscal intermediaries" that pay for HI services. Institutional services covered under the SMI program are outpatient hospital services, home health agency services, laboratory services performed in hospital outpatient departments, and other services such as renal dialysis performed in free-standing dialysis facilities, services in outpatient rehabilitation facilities, and services in rural health clinics.

Reimbursements for institutional services occur in two stages. First, bills are submitted to the intermediaries and interim payments are made on the basis of these bills. The second stage occurs at the close of a provider's accounting period, when a cost report is submitted and lump-sum payments or recoveries are made to correct for the difference between interim payments and final settlement amounts for providing covered services (net of coinsurance and deductible amounts). Tabulations of the bills are prepared by date of service and the lump-sum settlements, which are reported only on a cash basis, are adjusted (using approximations) to allocate them to the time of service.

(3) Managed Care Services

Managed care plans with contracts to provide health services to Medicare beneficiaries are not reimbursed through carriers or intermediaries but instead are reimbursed directly by HCFA on either a reasonable cost or capitation basis. Comprehensive data on such direct reimbursements are available only on a cash basis. Certain approximations must be made to allocate expenses to the period when services were rendered.

b. Fee-for-Service Payments for Aged Enrollees and Disabled Enrollees without End-Stage Renal Disease (ESRD)

Disabled persons with ESRD have per enrollee costs which are substantially higher and quite different in nature from those of most other disabled persons. Hence, program costs for them have been excluded from the analysis in this section and are included in a later section. Similarly, costs associated with beneficiaries enrolled in managed care plans are discussed separately.

(1) Carrier Services

(a) Physician Services

Charges for physician services per fee-for-service enrollee are affected by a variety of factors. One factor, the increase in average charge per service, can be identified explicitly. Others can be recognized only by the fact that the increase in the average charge per service does not explain all of the increase in per enrollee charges year-to-year. Each of these categories will be discussed in turn.

Prior to 1992, bills submitted to the carriers during a specified "fee-screen year" were subject by statute to certain limitations on the level of fees to be allowed by the program for reimbursement purposes. The fee level allowed for a particular service by a physician was subject to reduction if it exceeded the median charge that the physician assessed for the same service in a prior base period. This median charge was called the "customary charge." Fees were subject to further reduction if they exceeded the prevailing charges for the locality (defined as the 75th percentile of customary charges for a particular service in a particular locality). Starting July 1, 1975, the rate of increase in prevailing charges was limited further by the application of the Medicare Economic Index (MEI). The customary and prevailing charge limits maintained by the carriers were called "fee screens." Allowed charges were charges after application of the fee screens and were the charges on which reimbursement was based.

Public Law 101-239 provided for the replacement of customary and prevailing charges with fee schedules for physician services starting in 1992. The fee schedules are based on a resource-based relative value scale. The fee schedule amount is equal to the product of the procedure's relative value, a conversion factor, and a geographic adjustment factor. Payments are based on the lower of the actual charge and the fee schedule amount. For the 4-year period from 1992 to 1995, the fee

schedule amounts were adjusted to reflect the prevailing charges in each fee screen area, to phase in the new payment system. Increases in physician fees are based on growth in the MEI, plus a performance adjustment reflecting whether past growth in the volume and intensity of services met specified targets.

As a result of the Balanced Budget Act of 1997, beginning in 1999, the MEI is adjusted to match spending under a sustainable growth rate (SGR) mechanism. It should be noted that the SGR process enacted as part of the Balanced Budget Act of 1997 contains technical deficiencies that, if not corrected, would cause unstable performance adjustments for physician fee updates in 1999 and later. For purposes of the estimates shown in this report, "expected values" of the performance adjustments are estimated, representing the *average* performance adjustments expected over the projection period. (In practice, without corrective legislation, actual performance adjustments would oscillate randomly between the legislated limits of +3 and -7 percent; prediction of specific year-by-year adjustments is thus impossible.)

Table II.F1 shows the projected MEI increases and average performance adjustments for 2000 through 2008. The physician fee updates shown though 1999 are actual values. The net increase in allowed fees shown in column 3 reflects the growth in the MEI, the performance adjustment, as well as any legislative impacts.

Table II.F1.—Components of Increases in Total Allowed Charges Per Fee-for-Service Enrollee for Carrier Services

[In percent]

Calendar year	Physician Fee Schedule: Increase due to price changes: MEI	MPA[1]	Net increase in allowed fees[2]	Residual factors	Total increase[3]	CPI	DME	Lab	Other carrier
Aged:									
1996	2.0	-1.2	0.8	1.2	2.0	2.8	11.9	-8.6	4.7
1997	2.0	-1.4	0.6	4.7	5.4	2.7	11.6	-2.0	7.6
1998	2.2	1.2	2.3	1.9	4.3	2.3	-3.7	1.8	5.7
1999	2.3	0.0	2.3	4.8	7.2	2.3	5.3	1.5	4.8
2000	2.2	-0.5	1.6	5.3	7.0	2.1	5.9	2.8	4.9
2001	1.6	-3.4	-1.8	4.2	2.3	2.5	5.3	3.8	5.1
2002	1.7	-3.5	-1.9	4.3	2.3	2.6	5.2	3.9	5.1
2003	1.7	-3.2	-1.6	4.3	2.6	2.7	6.8	5.9	5.8
2004	2.0	-3.1	-1.2	4.3	3.1	3.0	7.2	6.2	6.1
2005	2.0	-3.2	-1.3	4.5	3.1	3.1	7.3	6.3	6.2
2006	2.1	-3.1	-1.0	4.4	3.3	3.2	7.4	6.4	6.3
2007	2.2	-2.9	-0.7	4.3	3.5	3.3	7.5	6.5	6.4
2008	2.3	-3.0	-0.7	4.3	3.5	3.3	7.5	6.5	6.4
Disabled (excluding ESRD):									
1996	2.0	-1.2	0.8	-0.3	0.5	2.8	7.5	-9.3	1.0
1997	2.0	-1.4	0.6	4.1	4.7	2.7	13.8	-4.3	2.1
1998	2.2	1.2	2.3	2.3	4.6	2.3	-2.8	1.1	4.4
1999	2.3	0.0	2.3	2.1	4.5	2.3	5.3	-0.4	5.2
2000	2.2	-0.5	1.6	2.6	4.2	2.1	5.8	1.3	5.8
2001	1.6	-3.4	-1.8	5.8	3.9	2.5	5.3	4.6	5.5
2002	1.7	-3.5	-1.9	7.1	5.0	2.6	5.2	5.5	4.8
2003	1.7	-3.2	-1.6	4.7	3.1	2.7	6.8	6.2	5.7
2004	2.0	-3.1	-1.2	4.2	2.9	3.0	7.1	6.2	6.1
2005	2.0	-3.2	-1.3	4.2	2.9	3.1	7.2	6.2	6.1
2006	2.1	-3.1	-1.0	4.1	3.1	3.2	7.3	6.3	6.2
2007	2.2	-2.9	-0.7	4.1	3.3	3.3	7.4	6.4	6.3
2008	2.3	-3.0	-0.7	4.1	3.3	3.3	7.4	6.5	6.3

[1]Medicare performance adjustment.

[2]Reflects the growth in the MEI, the performance adjustment, as well as any legislative impacts.

[3]Equals combined increases in allowed fees and residual factors.

Per capita physician charges also have increased each year as a result of a number of other factors besides fee increases, including more physician visits per enrollee, the aging of the Medicare enrollment, greater use of specialists and more expensive techniques, and certain administrative actions. The fourth column of table II.F1 shows the increases in charges per enrollee resulting from these residual causes. Because the measurement of increased allowed charges per service is subject to error, this error is included implicitly under residual causes. Based on the increases in table II.F1, table II.F2 shows the estimates of

the incurred reimbursement for physician services per fee-for-service enrollee.

Table II.F2.—Incurred Reimbursement Amounts Per Fee-for-Service Enrollee for Carrier Services

Calendar year	Fee-for-service enrollment [millions]	Physician fee schedule	DME	Lab	Other carrier
Aged:					
1995	28.473	$922.72	$108.32	$177.23	$116.13
1996	27.887	943.38	120.47	162.21	121.46
1997	27.104	955.83	134.56	158.50	131.30
1998	26.306	1,039.65	129.12	160.43	138.67
1999	25.863	1,118.93	136.63	163.45	145.49
2000	25.087	1,203.10	144.85	168.21	152.88
2001	24.525	1,232.00	152.74	174.78	160.80
2002	24.148	1,261.39	160.91	181.76	169.22
2003	23.916	1,295.21	172.17	192.67	179.27
2004	23.771	1,336.39	184.73	204.85	190.47
2005	23.727	1,379.53	198.39	218.04	202.56
2006	23.786	1,426.86	213.25	232.24	215.61
2007	23.980	1,478.32	229.42	247.57	229.73
2008	24.323	1,531.52	246.80	263.90	244.75
Disabled (excluding ESRD):					
1995	3.557	738.02	145.99	133.17	149.62
1996	3.696	743.35	156.42	121.40	150.27
1997	3.748	781.13	178.44	116.62	155.72
1998	3.793	818.92	173.86	117.26	162.11
1999	3.814	856.04	183.70	116.50	170.97
2000	3.861	895.90	194.68	117.92	181.44
2001	3.931	932.66	205.25	123.67	192.01
2002	4.028	982.03	216.18	130.97	201.65
2003	4.151	1,013.25	231.24	139.36	213.74
2004	4.289	1,044.48	248.05	148.25	227.20
2005	4.444	1,075.77	266.32	157.69	241.53
2006	4.606	1,110.27	286.19	167.77	256.95
2007	4.760	1,148.26	307.82	178.79	273.73
2008	4.897	1,187.97	331.06	190.55	291.54

(b) DME, Laboratory, and Other Carrier Services

At one time, all the non-physician carrier services were reimbursed on a "fee screen" basis similar to physician services prior to 1992 (with the exception that the MEI was not applied to their prevailing charges). Over time, special reimbursement rules have been developed for such services. Beginning July 1, 1984 a unique fee schedule was established for laboratory tests performed in physician offices and independent laboratories. However, the laboratory fee schedule does not pertain to all laboratory services, such as pathology services and blood handling.

These services are reimbursed based on other fee schedules or other reimbursement mechanisms. In 1987 a fee schedule was established for certain DME items, and in 1989 another fee schedule was developed for additional DME items (prosthetics and orthotics). Similarly, over time other unique fee schedules or reimbursement mechanisms have been established for all other non-physician carrier services.

Table II.F1 shows the increases in the allowed charges per fee-for-service enrollee for DME, laboratory services, and other carrier services. Based on the increases in table II.F1, table II.F2 shows the corresponding estimates of the incurred reimbursement for these services per fee-for-service enrollee. The fee schedules for each of these expenditure categories are updated by increases in the Consumer Price Index (CPI), together with applicable legislated limits on payment updates. In addition, per capita charges for these expenditure categories have grown as a result of a number of other factors, such as increased number of services provided, the aging of the Medicare enrollment, more expensive services, and certain administrative actions. This growth is projected based on recent past trends in growth per enrollee.

(2) Intermediary Services

Originally, all intermediary services were reimbursed on a "reasonable cost" basis. The "reasonable costs" for a particular provider were the provider's aggregate costs associated with SMI beneficiaries. While the provider does not have costs per service, the provider does have a charge for each service. These charges were used to determine any beneficiary deductible or coinsurance liability. The SMI reimbursement would be the difference between the lower of the provider's reasonable costs or aggregate SMI charges and the aggregate amounts collected by the provider for any associated deductible and coinsurance payments.

Over the years legislation modified this reimbursement mechanism for various types of services. Beginning July 1, 1984 the same laboratory fee schedule established for tests performed in physician offices and independent laboratories also applied to laboratories in hospital outpatient departments, but with slightly higher rates. Subsequent legislation made the two fee schedules identical. The Balanced Budget Act of 1997 implemented a prospective payment system for services performed in the outpatient department of a hospital, which is expected to begin sometime in 2000. It also implemented a prospective payment system for home health agency services, which is expected to begin October 1, 2000.

The historical and projected increases in charges and costs per fee-for-service enrollee for intermediary services are shown in table II.F3. The projected increases shown in table II.F3 reflect the impact of the provisions in the Balanced Budget Act of 1997. These include the transfer of a majority of home health agency services from the HI trust fund to the SMI trust fund starting in 1998. All benefit payments for those home health agency services being transferred are to be paid out of the SMI trust fund beginning January 1998. However, for the 6-year period 1998 through 2003, sums of money will also be transferred from the HI trust fund to the SMI trust fund to phase in the financial impact of the transfer of these services. It should be noted that in table II.F3, and elsewhere in this section with the exception of table II.F7, the estimates for home health agency costs for 1998 through 2003 are the gross amounts associated with the payment of benefits and are not adjusted for the funds transferred from the HI trust fund.

Based on the increases in table II.F3, table II.F4 shows the estimates of the incurred reimbursement for the various intermediary services per fee-for-service enrollee. Each of these expenditure categories is projected based on recent past trends in growth per enrollee, together with applicable legislated limits on payment updates.

Table II.F3.—Components of Increases in Recognized Charges and Costs Per Fee-for-Service Enrollee for Intermediary Services

[In percent]

Calendar year	Outpatient hospital	Home health agency[1]	Outpatient lab	Other intermediary
Aged:				
1996	8.7	10.0	6.9	22.6
1997	7.7	2.1	7.1	14.9
1998	-0.5	3748.5[2]	15.3	5.3
1999	9.5	6.3	5.2	8.3
2000	9.9	7.5	4.9	9.5
2001	2.9	5.0	4.5	9.3
2002	8.2	7.2	4.5	9.3
2003	8.9	6.4	8.1	9.3
2004	9.3	6.0	8.4	9.3
2005	9.4	5.8	8.6	9.3
2006	9.5	5.6	8.7	9.3
2007	9.6	5.0	8.7	9.3
2008	9.6	4.3	8.7	9.3
Disabled (excluding ESRD):				
1996	8.4	0.0	0.7	29.5
1997	6.6	0.0	-0.4	34.6
1998	-4.5	(2)	30.8	6.4
1999	5.1	7.2	6.3	8.2
2000	6.5	6.5	6.1	9.4
2001	5.5	4.3	6.0	9.2
2002	12.0	6.3	6.0	9.3
2003	9.3	5.6	8.1	9.2
2004	9.2	5.1	8.4	9.2
2005	9.2	5.0	8.5	9.2
2006	9.2	4.9	8.6	9.3
2007	9.5	4.9	8.7	9.3
2008	9.5	5.1	8.7	9.3

[1]From July 1, 1981 to December 31, 1997, home health agency services were almost exclusively provided by the Medicare HI program. However, for those SMI enrollees not entitled to HI, the coverage of these services was provided by the SMI program. During that time, since all SMI disabled enrollees were entitled to HI, their coverage of these services was provided by the HI program. The extreme variation in SMI home health cost increases is largely attributable to random fluctuations in a service used by relatively few beneficiaries.

[2]Effective January 1, 1998, the coverage of a majority of home health agency services for those individuals entitled to HI and enrolled in SMI was transferred from the HI program to the SMI program. As a result, as of January 1, 1998, there was a large increase in SMI expenditures for these services for the aged enrollees, and SMI coverage for these services resumed for disabled enrollees.

Table II.F4.—Incurred Reimbursement Amounts Per Fee-for-Service Enrollee for Intermediary Services

Calendar year	Fee-for-service enrollment [millions]	Outpatient hospital	Home health agency	Outpatient lab	Other intermediary
Aged:					
1995	28.473	$280.87	$8.47	$38.72	$88.11
1996	27.887	301.50	9.41	41.38	108.06
1997	27.104	318.97	9.68	44.31	123.40
1998	26.306	307.73	378.10	51.09	129.76
1999	25.863	326.28	401.76	53.73	141.28
2000	25.087	365.80	431.60	56.33	154.89
2001	24.525	393.77	453.10	58.86	169.40
2002	24.148	432.38	485.51	61.48	185.19
2003	23.916	480.29	516.54	66.45	202.46
2004	23.771	535.54	547.10	72.04	221.33
2005	23.727	597.61	578.82	78.17	241.96
2006	23.786	666.86	610.83	84.91	264.51
2007	23.980	744.13	641.17	92.31	289.14
2008	24.323	829.39	668.69	100.36	316.08
Disabled (excluding ESRD):					
1995	3.557	337.23	0.00	55.72	80.84
1996	3.696	361.94	0.00	56.12	105.24
1997	3.748	379.29	0.00	55.90	139.59
1998	3.793	347.94	255.24	73.12	146.63
1999	3.814	357.75	273.71	77.75	163.45
2000	3.861	380.66	291.74	82.52	179.04
2001	3.931	381.62	307.56	87.50	195.76
2002	4.028	440.59	330.67	92.78	214.07
2003	4.151	498.32	352.37	100.29	234.00
2004	4.289	561.96	373.30	108.71	255.75
2005	4.444	632.34	394.33	117.97	279.58
2006	4.606	709.99	415.60	128.14	305.80
2007	4.760	797.55	437.77	139.32	334.46
2008	4.897	894.11	461.58	151.47	365.76

c. Fee-for-Service Payments for Persons Suffering from ESRD

Certain persons suffering from ESRD have been eligible to enroll for SMI coverage since July 1973 (under Section 299I of Public Law 92-603). For analytical purposes, those enrollees with ESRD who are also eligible as Disability Insurance beneficiaries are included in this section because their per enrollee costs are both higher and different in nature from those of most other disabled persons. Specifically, most of the SMI reimbursements for these persons is for kidney transplants and renal dialysis.

The estimates under the intermediate assumptions reflect the unique payment mechanism through which ESRD services are reimbursed under Medicare. Also, the estimates assume a continued increase in enrollment. The historical and projected enrollment and costs for SMI benefits are shown in table II.F5.

Table II.F5.—Enrollment and Incurred Reimbursement for End-Stage Renal Disease

	Average enrollment [thousands]		Reimbursement [millions]	
Calendar Year	Disabled ESRD	ESRD only	Disabled ESRD	ESRD only
1995	68	78	$1,341	$1,419
1996	73	83	1,481	1,537
1997	81	90	1,699	1,683
1998	87	95	1,843	1,815
1999	92	101	2,023	1,981
2000	98	107	2,219	2,158
2001	103	112	2,393	2,318
2002	109	118	2,563	2,479
2003	115	125	2,747	2,660
2004	121	131	2,947	2,850
2005	127	137	3,160	3,033
2006	133	142	3,395	3,204
2007	140	147	3,658	3,385
2008	148	152	3,940	3,587

d. Managed Care Costs

Program experience with managed care payments has shown a strong upward trend in recent years, reflecting rapid increases in the number of Medicare beneficiaries choosing to enroll in managed care plans. Enrollment has increased most rapidly in the capitated plans which currently account for approximately 95 percent of the managed care payments. For capitated plans, per capita amounts have grown following the same trend as fee-for-service per capita growth, based on the formula in the law to calculate managed care capitation amounts. The projection of future per capita amounts follows the requirements of the Balanced Budget Act of 1997 as related to the Medicare+Choice capitation amounts, which increase at rates based on the per capita growth for all of Medicare, less specified adjustments in 1998 to 2002.

The increases in managed care were quite large in the early 1980's but slowed in the late 1980's. Since then rapid growth has been occurring again. The projection of these increases assumes high enrollment growth in the next few years as additional Medicare+Choice plans become available and the enrollment process becomes more straightforward and then more modest increases based on growth in Medicare total enrollment after that.

e. Administrative Expenses

The ratio of administrative expenses to benefit payments has been about 2 percent in recent years and is projected to continue to decline in future years. Projections of administrative costs are based on estimates of changes in average annual wages.

3. Summary of Aggregate Reimbursement Amounts on a Cash Basis Under the Intermediate Assumptions

Table II.F6 shows aggregate historical and projected reimbursement amounts on a cash basis under the intermediate assumptions, by type of service. The difference between reimbursement amounts on a cash versus incurred basis results from the lag between the time of service and the time of payment. Over time this lag has been decreasing.

Table II.F6.—Aggregate Reimbursement Amounts on a Cash Basis

[In millions]

Calendar year	Carrier					Intermediary							
	Physician fee schedule	DME	Lab	Other	Total	Hospital	Lab	Home health agency	Other	Total	Total FFS	Managed Care	Total SMI
Historical Data:													
1995	29,826	3,439	5,828	3,628	42,722	10,855	1,441	246	3,276	15,817	58,539	6,610	65,149
1996	29,462	3,931	5,041	3,942	42,376	11,095	1,514	257	3,797	16,663	59,039	9,558	68,597
1997	30,760	4,400	4,859	4,166	44,185	11,498	1,570	256	4,283	17,607	61,792	10,962	72,753
1998	31,801	4,164	4,766	4,282	45,012	10,405	1,721	6,736[1]	4,157	23,019[1]	68,031[1]	15,097[1]	83,128[1]
Intermediate Estimates:													
1999	33,333	4,279	4,780	4,410	46,803	11,380	1,867	10,658[1]	4,774	28,679[1]	75,482[1]	18,236[1]	93,718[1]
2000	34,926	4,434	4,780	4,527	48,666	12,194	1,928	11,930[1]	5,104	31,156[1]	79,822[1]	21,877[1]	101,699[1]
2001	35,422	4,603	4,873	4,687	49,584	12,972	1,997	12,140[1]	5,484	32,593[1]	82,177[1]	24,533[1]	106,710[1]
2002	36,094	4,806	5,021	4,883	50,804	14,155	2,080	12,844[1]	5,927	35,006[1]	85,809[1]	27,052[1]	112,861[1]
2003	36,984	5,123	5,289	5,154	52,550	15,599	2,233	13,578[1]	6,442	37,852[1]	90,402[1]	29,702[1]	120,104[1]
2004	38,167	5,501	5,611	5,477	54,756	17,302	2,419	14,349	7,025	41,095	95,852	32,119	127,971
2005	39,576	5,938	5,984	5,851	57,350	19,266	2,632	15,190	7,686	44,775	102,125	34,608	136,733
2006	41,268	6,439	6,411	6,279	60,397	21,511	2,875	16,114	8,434	48,934	109,330	37,772	147,102
2007	43,293	7,015	6,906	6,773	63,987	24,110	3,152	17,101	9,288	53,651	117,638	41,175	158,813
2008	45,645	7,674	7,475	7,338	68,132	27,129	3,471	18,139	10,274	59,013	127,145	44,855	172,000

[1]Aggregate benefit payments without adjustment for monies transferred from the HI trust fund for home health agency costs, as provided by the Balanced Budget Act of 1997.

4. Projections Under Alternative Assumptions

Cash disbursements (benefit payments and administrative expenses less monies transferred from the HI trust fund for home health agency costs) for the low cost and high cost alternatives were developed by examining the incurred and cash disbursements under the intermediate assumptions. Beginning in the middle of calendar year 1998, the low cost and high cost incurred benefits for the first 12-month period reflect some variation in the incurred benefits under the intermediate assumptions for that period. Thereafter, the low cost and high cost alternatives contain assumptions which result in incurred benefits increasing, relative to GDP, 2 percent less rapidly and 2 percent more rapidly, respectively, than the results under the intermediate assumptions. The low cost and high cost cash benefits reflect the same relationship to the cash benefits under the intermediate assumptions as the respective incurred benefits do to the incurred benefits under the intermediate assumptions. Administrative expenses under the low cost and the high cost alternatives are projected based on their respective wage series growth. Based on the above methodology, cash disbursements as a percentage of the GDP were calculated for all three sets of assumptions and are displayed in table II.F7.

Table II.F7.—SMI Cash Disbursements as a Percent of the Gross Domestic Product for Calendar Years 1998-2008[1]

		Alternatives	
Calendar year	Intermediate assumptions	Low Cost	High Cost
1998	0.91	0.91	0.91
1999	0.96	0.94	0.98
2000	1.06	1.02	1.10
2001	1.08	1.01	1.15
2002	1.12	1.03	1.21
2003	1.16	1.05	1.28
2004	1.18	1.05	1.33
2005	1.20	1.04	1.38
2006	1.23	1.05	1.44
2007	1.26	1.05	1.50
2008	1.30	1.06	1.58

[1]Disbursements are the sum of benefit payments and administrative expenses.

III. APPENDICES

A. LONG-RANGE ESTIMATES OF MEDICARE INCURRED DISBURSEMENTS AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT

Expressing Medicare incurred disbursements as a percentage of the gross domestic product (GDP) gives a relative measure of the size of the Medicare program compared to the general economy. The projection of this measure affords the public an idea of the relative financial resources that will be necessary to pay for Medicare services.

Table III.A1 shows estimated incurred disbursements for the HI and SMI programs under the intermediate assumptions expressed as a percentage of GDP, for selected years over the period 1998-2073. These incurred disbursements assume no change in current law for any specific program legislation or for any comprehensive health care reform. The 75-year projection period fully allows for the presentation of future contingencies that reasonably may be expected to occur, such as the impact of a large increase in enrollees which occurs after the turn of the century. This large increase in enrollees occurs because the relatively large number of persons born during the period between the end of World War II and the mid-1960's (known as the baby boom) will reach retirement age and begin to receive benefits.

Table III.A1.—HI and SMI Incurred Disbursements as a Percent of Gross Domestic Product[1]

	Disbursements as a percent of GDP		
Calendar year	HI	SMI	Total
1998	1.60	0.93	2.53
1999	1.56	0.98	2.55
2000	1.56	1.05	2.61
2005	1.58	1.21	2.79
2010	1.66	1.38	3.04
2015	1.77	1.68	3.45
2020	1.95	1.97	3.92
2025	2.20	2.23	4.43
2030	2.44	2.43	4.88
2035	2.62	2.53	5.15
2040	2.73	2.53	5.25
2045	2.78	2.49	5.27
2050	2.80	2.46	5.26
2055	2.82	2.47	5.30
2060	2.87	2.54	5.42
2065	2.94	2.61	5.55
2070	3.02	2.65	5.67

[1]Disbursements are the sum of benefit payments and administrative expenses.

For HI, program costs beyond the first 25-year projection period are based on the assumption that costs per unit of service will increase at

the same rate as average hourly earnings. The associated aggregate disbursements are then represented as a percentage of GDP. For SMI, increases in the costs per enrollee during the initial 25-year period are assumed to gradually decline in the last 12 years to the same rate as GDP per capita and then to continue at the same rate as GDP per capita in the last 50 years.

Based on these assumptions, incurred Medicare disbursements as a percent of GDP are projected to increase rapidly from 2.53 percent in 1998 to 5.15 percent in 2035 and then to increase gradually to 5.67 percent in 2070. After 2035, while Medicare disbursements as a percent of GDP increase more slowly, the HI percentage grows steadily while the SMI percentage decreases slightly through 2050 and then increases again through 2070.

B. MEDICARE COST SHARING AND PREMIUM AMOUNTS

HI beneficiaries who use covered services may be subject to deductible and coinsurance requirements. A beneficiary is responsible for an inpatient hospital deductible amount, which is deducted from the amount payable by the HI program to the hospital, for inpatient hospital services furnished in a spell of illness. When a beneficiary receives such services for more than 60 days during a spell of illness, he or she is responsible for a coinsurance amount equal to one-fourth of the inpatient hospital deductible, for each of days 61-90 in the hospital. After 90 days in a spell of illness each individual has 60 lifetime reserve days of coverage. The coinsurance amount for these days is equal to one-half of the inpatient hospital deductible. A beneficiary is responsible for a coinsurance amount equal to one-eighth of the inpatient hospital deductible for each of days 21-100 of skilled nursing facility services furnished during a spell of illness.

Most persons age 65 and older and many disabled individuals under age 65 are insured for Medicare Hospital Insurance benefits without payment of any premium. The Social Security Act provides that certain aged and disabled persons who are not insured may voluntarily enroll, subject to the payment of a monthly premium. In addition, since 1994, voluntary enrollees may qualify for a reduced premium if they have at least 30 quarters of covered employment.

Under SMI, all enrollees are subject to a monthly premium. Most SMI services are subject to an annual deductible and coinsurance. The annual deductible and the coinsurance percentage (percent of costs that the enrollee must pay) are set by statute. The coinsurance percentage has remained at 20 percent since the inception of the program.

Table III.B1 shows the historical levels of HI and SMI deductibles, HI coinsurance, and HI and SMI premiums, as well as projected values for future years based on the intermediate set of assumptions used in estimating the operations of the trust funds. Certain anomalies in these values resulted from specific program features in particular years (e.g., the effect of the Medicare Catastrophic Coverage Act of 1988 on 1989 values). The amounts of the HI and SMI premiums and the HI deductibles and coinsurance are required to be announced in the Federal Register in September of each year for the upcoming year. The values listed in the table for future years are estimates, and actual amounts are likely to be somewhat different as experience emerges.

Table III.B1.—Medicare Cost Sharing and Premium Amounts

	HI						SMI	
		Inpatient coinsurance[1]			Monthly premium			
Year	Inpatient hospital deductible[1]	Days 61-90	Lifetime reserve days	SNF coinsurance days[1]	Standard[2]	Reduced[1]	Monthly premium[2]	Annual deductible[1]
Historical Data:								
1967	$40	$10	—	$5.00	—	—	$3.00	$50
1968	40	10	$20	5.00	—	—	4.00	50
1969	44	11	22	5.50	—	—	4.00	50
1970	52	13	26	6.50	—	—	4.00	50
1971	60	15	30	7.50	—	—	5.30	50
1972	68	17	34	8.50	—	—	5.60	50
1973	72	18	36	9.00	$33	—	5.80	60
1974	84	21	42	10.50	36	—	6.30	60
1975	92	23	46	11.50	40	—	6.70	60
1976	104	26	52	13.00	45	—	6.70	60
1977	124	31	62	15.50	54	—	7.20	60
1978	144	36	72	18.00	63	—	7.70	60
1979	160	40	80	20.00	69	—	8.20	60
1980	180	45	90	22.50	78	—	8.70	60
1981	204	51	102	25.50	89	—	9.60	60
1982	260	65	130	32.50	113	—	11.00	75
1983	304	76	152	38.00	113	—	12.20	75
1984	356	89	178	44.50	155	—	14.60	75
1985	400	100	200	50.00	174	—	15.50	75
1986	492	123	246	61.50	214	—	15.50	75
1987	520	130	260	65.00	226	—	17.90	75
1988	540	135	270	67.50	234	—	24.80	75
1989[3]	560	—	—	25.50	156	—	31.90	75
1990	592	148	296	74.00	175	—	28.60	75
1991	628	157	314	78.50	177	—	29.90	100
1992	652	163	326	81.50	192	—	31.80	100
1993	676	169	338	84.50	221	—	36.60	100
1994	696	174	348	87.00	245	$184	41.10	100
1995	716	179	358	89.50	261	183	46.10	100
1996	736	184	368	92.00	289	188	42.50	100
1997	760	190	380	95.00	311	187	43.80	100
1998	764	191	382	95.50	309	170	43.80	100
1999	768	192	384	96.00	309	170	45.50	100
Intermediate Estimates:								
2000	776	194	388	97.00	312	172	48.50	100
2001	792	198	396	99.00	320	176	52.30	100
2002	812	203	406	101.50	332	183	56.50	100
2003	844	211	422	105.50	345	190	61.50	100
2004	880	220	440	110.00	354	195	66.30	100
2005	916	229	458	114.50	370	204	69.90	100
2006	956	239	478	119.50	387	213	74.80	100
2007	1,000	250	500	125.00	403	222	80.00	100
2008	1,044	261	522	130.50	418	230	85.00	100
2009	1,092	273	546	136.50	434	239	90.30	100

[1]Amounts shown are effective for calendar years.

[2]Amounts shown for 1967-1982 are for the 12-month periods ending June 30; amounts shown for 1983 are for the period July 1, 1982 through December 31, 1983; amounts shown for 1984 and later are for calendar years.

[3]Anomalies in the 1989 values are due to the Medicare Catastrophic Coverage Act of 1988. Most of the provisions of the Act were repealed the following year.

The Federal Register notice announcing the HI deductible and coinsurance amounts for 1999 included an estimate of the aggregate cost to HI beneficiaries for the changes in the deductible and coinsurance amounts from 1998 to 1999. At that time, it was estimated that in 1999 there will be about 8.4 million inpatient deductibles paid at $768 each, about 2.3 million inpatient days subject to coinsurance at $192 per day (for hospital days 61 through 90), about 1.1 million lifetime reserve days subject to coinsurance at $384 per day, and about 34.4 million extended care days subject to coinsurance at $96 per day. Similarly, it was estimated that in 1998 there were about 8.6 million deductibles paid at $764 each, about 2.3 million days subject to coinsurance at $191 per day (for hospital days 61 through 90), about 1.1 million lifetime reserve days subject to coinsurance at $382 per day, and about 32.3 million extended care days subject to coinsurance at $95.50 per day. Therefore, the total increase in cost to beneficiaries was estimated to be about $100 million (rounded to the nearest $10 million), due to (1) the increase in the inpatient deductible and coinsurance amounts and (2) the change in the number of deductibles and daily coinsurance amounts paid.

C. GLOSSARY

Actuarial rates. One half the expected monthly cost of the SMI program for each aged enrollee (for the aged actuarial rate) and one half of the expected monthly cost for each disabled enrollee (for the disabled actuarial rate) for the duration the rate is in effect.

Actuarial status. A measure of the adequacy of the financing as determined by the difference between assets and liabilities at the end of the periods for which financing was established.

Administrative expenses. Expenses incurred by the Department of HHS and the Department of the Treasury in administering the SMI program and the provisions of the Internal Revenue Code relating to the collection of contributions. Such administrative expenses, which are paid from the SMI trust fund, include expenditures for contractors to determine costs of and make payments to providers as well as salaries and expenses of HCFA.

Advisory Council on Social Security. Prior to the enactment of the Social Security Independence and Program Improvements Act of 1994 (Public Law 103-296) on August 15, 1994, the Social Security Act required the appointment of an Advisory Council every 4 years to study and review the financial status of the OASDI and Medicare programs. The most recent Advisory Council was appointed on June 9, 1994; and its report on the financial status of the OASDI program was submitted on January 6, 1997. Under the provisions of Public Law 103-296, this is the last Advisory Council to be appointed.

Aged enrollee. An individual, age 65 or over, who is enrolled in the SMI program.

Allowed charge. Individual charge determined by a carrier for a covered SMI medical service or supply.

Amortization. Process of the gradual retirement of an outstanding debt by making periodic payments to the trust fund.

Assets. Treasury notes and bonds guaranteed by the federal government and cash held by the trust funds for investment purposes.

Assumptions. Values relating to future trends in certain key factors which affect the balance in the trust funds. Demographic assumptions

include fertility, mortality, net immigration, marriage, divorce, retirement patterns, disability incidence and termination rates, and changes in the labor force. Economic assumptions include unemployment, average earnings, inflation, interest rates, and productivity. Three sets of economic assumptions are presented in the Trustees Report:

(1) The low cost alternative with relatively rapid economic growth, low inflation, and favorable (from the standpoint of program financing) demographic conditions.
(2) The intermediate assumptions represent the Trustees best estimates of likely future economic and demographic conditions.
(3) The high cost alternative with slow economic growth, more rapid inflation, and financially disadvantageous demographic conditions.

Average market yield. A computation which is made on all marketable interest-bearing obligations of the United States. It is computed on the basis of market quotations as of the end of the calendar month immediately preceding the date of such issue.

Baby boom. The period from the end of World War II through the mid-1960s marked by unusually high birth rates.

Beneficiary. A person enrolled in the SMI program. See also "Aged enrollee" and "Disabled enrollee."

Benefit payments. The amounts disbursed for covered services after the deductible and coinsurance amounts have been deducted.

Board of Trustees. A Board established by the Social Security Act to oversee the financial operations of the Federal SMI Trust Fund. The Board is composed of six members, four of whom serve automatically by virtue of their positions in the federal government: the Secretary of the Treasury, who is the Managing Trustee, the Secretary of Labor, the Secretary of HHS, and the Commissioner of Social Security. The other two members are appointed by the President and confirmed by the Senate to serve as public representatives. Stephen G. Kellison and Marilyn Moon began serving 4-year terms on July 20, 1995. The Commissioner of Social Security became a member of the Board effective March 31, 1995, under Public Law 103-296, approved August 15, 1994. The Administrator of HCFA serves as Secretary of the Board of Trustees.

Bond. A certificate of ownership of a specified portion of a debt due by the federal government to holders, bearing a fixed rate of interest.

Carrier. A private or public organization, under contract to HCFA, to administer the SMI benefits under Medicare. Also referred to as "contractors," these organizations determine coverage and benefit amounts payable and make payments to physicians, suppliers, and beneficiaries.

Cash basis. The costs of the service at the point payment was made rather than when the service was performed.

Certificate of indebtedness. A short-term certificate of ownership of 12 months or less of a specified portion of a debt due by the federal government to individual holders, bearing a fixed rate of interest.

Coinsurance. Portion of the SMI costs paid by the beneficiary after meeting the annual deductible.

Consumer Price Index (CPI). A measure of the average change in prices over time in a fixed group of goods and services. In this report, all references to the CPI relate to the CPI for Urban Wage Earners and Clerical Workers (CPI-W).

Contingency. Funds included in the trust fund to serve as a cushion in case actual expenditures are higher than those projected at the time financing was established. Since the financing is set prospectively, actual experience may be different than the estimates used in setting the financing.

Contingency margin. An amount included in the actuarial rates to provide for changes in the contingency level in the trust fund. Positive margins increase the contingency level and negative margins decrease it.

Covered services. Services for which SMI pays, as defined and limited by statute. Covered services are provided for most physician services, care in outpatient departments of hospitals, diagnostic tests, DME, ambulance services, and other health services which are not covered by the HI program.

Deductible. The annual amount payable by the beneficiary for covered services before Medicare makes reimbursement.

Demographic assumptions. See "Assumptions."

Disability. For Social Security purposes, the inability to engage in substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or to last for a continuous period of not less than 12 months. Special rules apply for workers age 55 or older whose disability is based on blindness. The law generally requires that a person be disabled continuously for 5 months before he or she can qualify for a disabled-worker cash benefit. An additional 24 months is necessary to qualify under Medicare.

Disabled enrollee. An individual under age 65 who has been entitled to disability benefits under Title II of the Social Security Act or the Railroad Retirement System for at least 2 years and who is enrolled in the SMI program.

Durable medical equipment (DME). Items such as iron lungs, oxygen tents, hospital beds, wheelchairs, and seat lift mechanisms which are used in the patient's home and are either purchased or rented.

Economic assumptions. See "Assumptions."

Economic stabilization program. A legislative program during the early 1970s that limited price increases.

End-stage renal disease (ESRD). Permanent kidney failure.

Fee-screen year. A specified period of time in which SMI recognized fees pertain. The fee-screen year period has changed over the history of the program.

Fiscal year. The accounting year of the United States Government. Since 1976, each fiscal year has begun on October 1 of the prior calendar year and ended the following September 30. For example, fiscal year 1999 began October 1, 1998 and will end September 30, 1999.

General fund of the Treasury. Funds held by the Treasury of the United States, other than revenue collected for a specific trust fund (such as SMI) and maintained in a separate account for that purpose. The majority of this fund is derived from individual and business income taxes.

General revenue. Income to the SMI trust fund from the general fund of the Treasury.

Gross Domestic Product (GDP). The total dollar value of all goods and services produced in a year in the United States, regardless of who supplies the labor or property.

High cost alternative. See "Assumptions."

Home health agency. A public agency or private organization which is primarily engaged in providing skilled nursing services, other therapeutic services, such as physical, occupational, or speech therapy, and home health aide services, in the home.

Hospital Insurance (HI). The Medicare program which covers specified inpatient hospital services, posthospital skilled nursing, home health services, and hospice care for aged and disabled individuals who meet the eligibility requirements. Also known as Medicare Part A.

Incurred basis. The costs based on when the service was performed rather than when the payment was made.

Independent laboratories. A free-standing clinical laboratory meeting conditions for participation in the Medicare program and billing through a carrier.

Interest. A payment for the use of money during a specified period.

Intermediary. A private or public organization, under contract to HCFA, to determine costs of and make payments to providers for HI and certain SMI services.

Intermediate assumptions. See "Assumptions."

Low cost alternative. See "Assumptions."

Managed care. Includes Health Maintenance Organizations (HMO), Competitive Medical Plans (CMP), and other plans that provide health services on a prepayment basis which is either based on cost or risk depending on the type of contract they have with Medicare. See also "Medicare+Choice".

Medicare. A nationwide, federally administered health insurance program authorized in 1965 to cover the cost of hospitalization, medical care, and some related services for most people over age 65. In 1972, coverage was extended to people receiving Social Security Disability Insurance payments for 2 years, and people with ESRD. Medicare consists of two separate but coordinated programs—Part A (hospital insurance, HI) and Part B (supplementary medical insurance, SMI). Almost all persons aged 65 or over or disabled entitled to HI are eligible to enroll in the SMI program on a voluntary basis by paying a monthly premium. Health insurance protection is available to Medicare beneficiaries without regard to income.

Medicare+Choice. An expanded set of options for the delivery of health care under Medicare established by the Balanced Budget Act of 1997. Most Medicare beneficiaries can choose to receive benefits through the original fee-for-service program or through one of the following Medicare+Choice plans: (1) coordinated care plans (such as health maintenance organizations, provider sponsored organizations, and preferred provider organizations); (2) Medical Savings Account (MSA)/High Deductible plans (through a demonstration available to up to 390,000 beneficiaries); or (3) private fee-for-service plans.

Medicare Economic Index (MEI). An index which is often used in the calculation of the increases in the prevailing charge levels that help to determine allowed charges for physician services. In 1992 and later, this index is considered in connection with the update factor for the physician fee schedule.

Old-Age, Survivors, and Disability Insurance (OASDI). The Social Security programs which pay for (1) monthly cash benefits to retired-worker (old-age) beneficiaries and their spouses and children and to survivors of deceased insured workers (OASI) and (2) monthly cash benefits to disabled-worker beneficiaries and their spouses and children and for providing rehabilitation services to the disabled (DI).

Outpatient hospital. Part of the hospital providing services covered by SMI including services in an emergency room or outpatient clinic, ambulatory surgical procedures, medical supplies, such as splints, laboratory tests billed by the hospital, etc.

Part A. The Medicare Hospital Insurance program.

Part B. The Medicare Supplementary Medical Insurance program.

Provider. Any organization, institution, or individual who provides health care services to the Medicare beneficiaries. Physicians, ambulatory surgical centers, and outpatient clinics are some of the providers of services covered under Medicare Part B.

Residual factors. Factors other than price which include volume of services, intensity of services, and age/sex changes.

Resource-based relative value scale (RBRVS). A scale of national uniform relative values for all physicians' services. The relative value of each service must be the sum of relative value units representing physician work, practice expenses net of malpractice expenses, and the cost of professional liability insurance.

Social Security Act. Public Law 74-271, enacted August 14, 1935 with subsequent amendments. The Social Security Act consists of 20 titles, of which four have been repealed. The HI and SMI programs are authorized by Title XVIII of the Social Security Act.

Special public-debt obligation. Securities of the United States Government issued exclusively to the OASI, DI, HI, and SMI trust funds and other federal trust funds. Section 1841(a) of the Social Security Act provides that the public-debt obligations issued for purchase by the SMI trust fund shall have maturities fixed with due regard for the needs of the funds. The usual practice in the past has been to spread the holdings of special issues, as of each June 30, so that the amounts maturing in each of the next 15 years are approximately equal. Special public-debt obligations are redeemable at par at any time.

Supplementary Medical Insurance (SMI). The Medicare program which pays for a portion of the costs of physician's services, outpatient hospital services, and other related medical and health services for voluntarily insured aged and disabled individuals. Also known as Part B.

SMI premium. Monthly premium paid by those individuals who have enrolled in the voluntary SMI program.

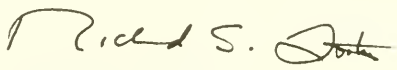
Sustainable Growth Rate. A system for establishing goals for the rate of growth in expenditures for physicians' services.

Term insurance. A type of insurance which is in force for a specified period of time.

Trust fund. Separate accounts in the United States Treasury mandated by Congress whose assets may only be used for a specified purpose. For the SMI trust fund, monies not withdrawn for current benefit payments and administrative expenses are invested in interest-bearing federal securities, as required by law; the interest earned is also deposited in the trust fund.

D. STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the techniques and methodology used herein to evaluate the financial status of the Federal Supplementary Medical Insurance Trust Fund are based upon sound principles of actuarial practice and are generally accepted within the actuarial profession; and (2) the assumptions used and the resulting actuarial estimates are, in the aggregate, reasonable for the purpose of evaluating the financial status of the trust fund, taking into consideration the experience and expectations of the program.



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